COMPOSITE SHUTTERS



SIZE STANDARDS

PRICING & SURCHARGES

ORDERING NOTES

SPECIFICATIONS

FOR ADDITIONAL INFORMATION ON INSTALLATION, OPERATION & CARE, VISIT LEVOLOR.COM/PREMIER.

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Revision History

This section provides an overview of Reference Guide revision (rev) updates. Revisions listed in this section reset each Spring launch.

Date	Revision Description	Affected Page(s)
02/04/25	New frames	Various
02/04/25	Addition of Upward Only closure	Various
02/04/25	Addition of Contemporary stiles	Various
02/04/25	Updated Track System frames and valances	Various
02/04/25	Update Color Coordination chart	LPCS-73

Discontinuation History

This section provides an overview of discontinued frames and colors. Discontinued items listed reset each Spring launch.

Date	Discontinued Description	Affected Page(s)
FRAMES		
02/04/25	1 3/4" Traditional L-Frame (L65K)	LPCS-13, LPCS-19, various others
02/04/25	Colonial Z-Frame (Z64K)	LPCS-13, LPCS-21, various others
COLORS		
02/04/25	6700 Alpine White	LPCS-15, LPCS-73

Marking an evolutionary trend in shutters, Composite Shutters combine the great style of wood with the strength, stability and straightness of advanced modern-day materials. Composite Shutters offer the modern elegance of quality shutters at an economical price point.
Composite Shutters are offered with 2 1/2", 3 1/2" or 4 1/2" elliptical louvers. They feature easy operation and the freedom to control light, heat, airflow, noise, view and offer privacy.

RECTANGULAR SHUTTERS

- Standard Hinged Panels
- Bi-Fold Track Configurations
- Bypass Track Configurations

Special applications include:

- French Doors
- Double-Hung Shutters
- Bay/Corner Windows
- Bypass Open Louver Track
- Café Shutters
- Bypass Triple Track

Operating systems include:

- Front Tilt
- Concealed Tilt
- Upward Only Closure
- Up/Down Closure

ARCH AND ANGLE TOP PANELS

Arch top and angle top panels allow coverage of shaped openings with shutter panels that have a contoured or angled shape at the top. The bottoms of the panels are standard, while the tops are arched or angled to fit the opening.

SPECIALTY SHAPES

A wide range of framed and unframed specialty shapes are available as stand-alone shutters or combined with standard hinged panels below in one continuous opening. Most specialty shapes feature operable louvers arranged as a sunburst around a hub, however select shapes are available with horizontal louvers.

INNOVATION

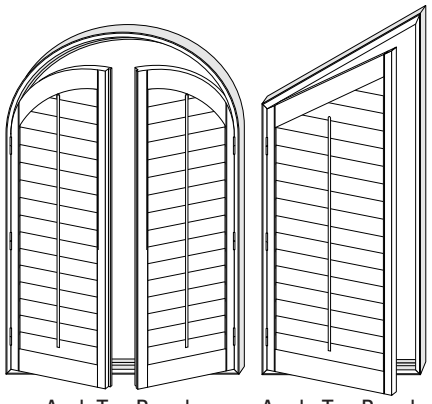
Composite Shutters feature a micro-smooth matte finish that protects the shutter from common spills. The shutters are built using LVL construction to resist warping and bowing.

LONG LIFE AND EASY CARE

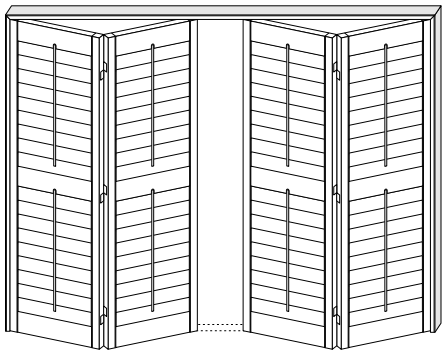
Composite Shutters offer elegance, beauty and durability. High quality features, such as dovetail construction, LVL construction, reputable brand name and state-of-the-art finish ensure easy cleaning, lasting beauty and reliable performance year after year.

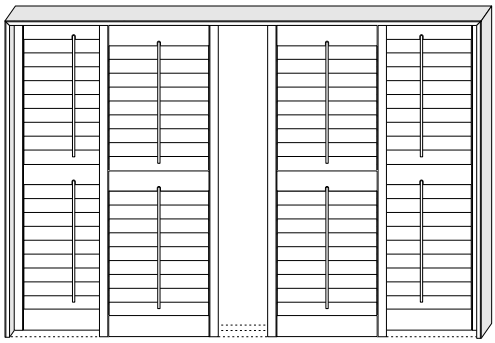
COORDINATION PROGRAMS

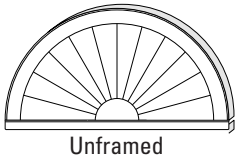
See Coordinating Products for information on coordinating Composite Shutters colors with Hardwood Shutters, Poly Shutters, Alternative Wood Blinds, or Wood Blinds.

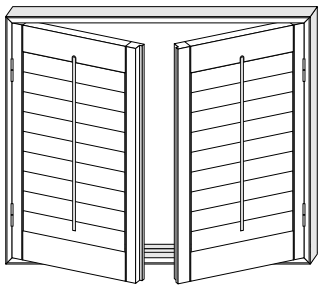


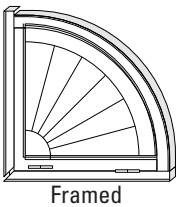
Arch Top and Angle Top Panels


Bi-Fold Track Configurations


Bypass Track Configurations


Unframed




Framed

Specialty Shapes

Standard Hinged Panels

How to Use the Size Standards Charts

The Size Standards charts are designed to be a quick reference to size standards and where to find further size specifications. Further size specifications are referenced by the linked configuration heading. Always read the notes under the chart for important additional information.

Important: shutter dimensions must be equal to or less than the maximum dimensions (width and height) and equal to or greater than the Minimum dimensions (width and height) to be within specification guidelines.

PANEL SIZE STANDARDS (Not including Frames)	Standard Hinged Panels						Arch Top and Angle Top		Track Configuration					
	Individually Hinged			Bi-Fold Hinged (No Track)			Individually Hinged	Bi-Fold Hinged (No Track)	Bi-Fold Track Configurations			Bypass Track Configurations		
	2½" Louvers	3½" Louvers	4½" Louvers	2½" Louvers	3½" Louvers	4½" Louvers	All Louver Sizes	All Louver Sizes	2½" Louvers	3½" Louvers	4½" Louvers	2½" Louvers	3½" Louvers	4½" Louvers
Min. Panel Width	7"	7"	7"	7" [1]	7" [1]	7" [1]	12"	12"	12"	12"	12"	12"	12"	12"
Max. Panel Width	36"	36"	36"	24"	24"	24"	36"	24"	24"	24"	24"	36"	36"	36"
Min. Panel Height	12"	14"	17"	12"	14"	17"	18" [2]	18" [2]	12"	14"	17"	12"	14"	17"
Max. Panel Height	116"	116"	116"	116"	116"	116"	116"	116"	116"	116"	116"	116"	116"	116"

[1] Panels under 12" in width are not recommended due to possible limited functionality.

[2] In some cases, it may be possible to order panels under 18" in height.

Notes

- **Minimum and maximum ordered widths including frames**: Refer to Standard Hinged Panels, Bi-Fold Track Configurations, and Bypass Track Configurations.
- **Top and bottom rails**:
  - **Standard hinged panels**: Top and bottom rails will be of equal height, varying from $3\frac{5}{8}$" to $5\frac{7}{8}$", depending on panel height and louver selection.
  - **Arch Top and Angle Top panels**: Top rails are fixed at 3" and bottom rails vary from $3\frac{5}{8}$" to $5\frac{7}{8}$", depending on panel height and louver selection.
  - **Double-Hung panels**: Adjacent center rails will have fixed heights. See Café and Double-Hung Shutters.
- **Divider rails**:
  - **Standard hinged panels**: Panels greater than 72" in height require one divider rail. Panels greater than 102" in height require two divider rails.
  - **Track Configurations, French door cut-outs and their companions**: Panels greater than 84" in height require one divider rail.
  - **Other specifications**: Maximum space between divider rails is 72" for Standard Hinged Panels and 84" for Track Configurations, French door cut-outs, and their companions. There must be a minimum of two louvers between divider rails and the top or bottom rail.
- **Tie louvers**: Panels greater than 60" tall will have tie louvers for additional strength, unless a divider rail is ordered.
- **Shoulder height**: Minimum shoulder height for Arch Top and Angle Top panels is zero. See Arch Top and Angle Top Panels.
- **Hinges**: Number of hinges per panel height is 2 hinges up to 24"; 3 hinges $24\frac{1}{16}$" to 72"; 4 hinges $72\frac{1}{16}$" to 92"; and 5 hinges $92\frac{1}{16}$" to 116".
- **Splicing**: Frames and valances greater than 115" in width or height may require splicing.

SPECIALTY SHAPES SIZE STANDARDS (Framed and Unframed)	Sunburst Louvers										Horizontal Louvers 2½", 3½", and 4½" Louvers			
	A1 Perfect Arch	A2 Quarter Circle	A3 Circle	A4 Extended Eyebrow	A4 Extended Arch	A5 Eyebrow Arch	A6 Extended Quarter Eyebrow Arch	A7 Angle	A7 Extended Angle	A8 Pentagon	T1 Oval	T2 Circle	T3 Hexagon	T4 Octagon
Min. Panel Width	22"	11"	22"	22"	22"	22"	14"	14"	14"	22"	20"	22"	24"	24"
Max. Panel Width	102"	51"	102"	102"	102"	102"	51"	51"	51"	102"	36"	36"	36"	36"
Min. Panel Height	11"	11"	22"	16"	16"	14"	16"	14"	16"	16"	24"	22"	24"	24"
Max. Panel Height	51"	51"	102"	51"	51"	51"	51"	51"	51"	51"	60"	36"	48"	48"

Notes

- **Illustrations and further specifications**: Refer to Specialty Shapes℠.
- **Sunburst sizes**: Sunburst sizes depend on the maximum louver reach of 51". See Specifications℠.
- **Frames**: All shapes are available framed or unframed.
- **Returns**: Outside mount unframed specialty shapes may be ordered with or without returns. Returns add ½" per side. Not available for unframed inside mounts.
- **Top Rail**: Sunburst specialty shape top rails are 2" for shapes up to 65" wide, 3" for shapes between 65" and 96", and 3½" for shapes greater than 96" wide.
- **Hinges**: Wherever possible, framed sunburst specialty shapes will be hinged. See Specialty Shapes℠.
- **Arches and angles with horizontal louvers**: To order arch or angle window shapes with horizontal louvers, order as an Arch Top or Angle Top panel. See Arch Top and Angle Top Panels℠ for specifications.

Product price only, not including freight, state/local taxes, measuring and installation, and other services associated with a custom installation.

How to Price Composite Shutters

The base prices on the Composite Shutters price charts are for Framed or Unframed standard hinged panels. Framed pricing includes any of the Composite frames.. A surcharge needs to be applied for any other configurations. Follow these basic pricing procedures:

1. Round up the ordered width and height dimensions to the nearest size shown on the price chart.
2. Locate the box where the correct width column meets the correct height row.
3. If the width exceeds the largest width on the chart, add the appropriate amount for each additional 6" of width.
4. Add any necessary surcharges. For surcharges, see Pricing – Surcharges & Accessories. Track configuration and arch top and angle top panel surcharges are width-based. All other surcharges (or deductions) are shown as a percentage of the base price or as a dollar amount.

The pricing examples below are rounded to the nearest dollar for illustration purposes.

Grid 1 Base Price

	WIDTH TO	12"	24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	102"	108"	114"	120"	EVERY 6" ADD
HEIGHT TO	36"	$434	434	434	447	520	595	667	741	815	889	964	1036	1110	1185	1259	1333	1406	1480	75
	42"	434	434	434	520	607	693	778	864	951	1036	1122	1210	1295	1380	1468	1554	1639	1726	86
	48"	437	434	495	595	693	791	889	986	1086	1185	1284	1380	1480	1579	1676	1775	1873	1971	99
	54"	492	447	558	667	778	889	1000	1110	1221	1333	1443	1554	1664	1775	1886	1996	2107	2216	111
	60"	545	495	618	741	864	986	1110	1233	1355	1480	1602	1726	1848	1971	2095	2216	2341	2463	124

How to Price a Front Tilt Framed Standard Hinged Panel less than 12" wide

Example: 11" x 60" unit, Front Tilt with Standard Z-Frame

1	Locate base price	Chart A2: 12" x 60" unit base price	$599
2	Total price (no surcharges)		$599

How to Price Concealed Tilt Unframed Standard Hinged Panels

Example: 42" x 72" unit, Concealed Tilt, Unframed

1	Locate base price	Chart A3: 42" x 72" unit base price	$1192
3	Total price		$1192

How to Price a Front Tilt Framed Bypass Track System with Stackback[1]

Example: 94" x 82" unit, Front Tilt, Bypass Frame with Standard Valance, stackback width = 141"

1	Locate base price	Chart A2: 96" x 84" base price	$3031
2	Add 141" track surcharge.	Width-based surcharge of $1020 + $160 for additional 21"	+1180
3	Total price		$4211

[1] See Stackback Design for an explanation of stackback.

How to Price a Front Tilt Continuous Framed Specialty Shape with Standard Hinged Panels

Example: Full opening 42" x 72", Perfect Arch (A1) 42" and standard shutter below 42" x 50 1/4", Front Tilt with Contemporary Z-Frame

1	Locate base price	Chart B2: 42" base price	$1905
2	Locate base price for standard hinged panels	Chart A2: 42" x 54" unit base price	+855
3	Total price		$2760

Product price only, not including freight, state/local taxes, measuring and installation, and other services associated with a custom installation.

A1 Unframed Front Tilt
(Base Price)

- Panels Only or with 2-Sided Hang Strip
- 2½", 3½", and 4½" Louvers
- Standard Hinged Panels
- T-Posts, Divider Rails, Build-Out (for some applications) and Hardware

HEIGHT TO \ WIDTH TO	12"	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	EVERY 6" ADD
36"	$434	434	434	447	520	595	667	741	815	889	964	1036	1110	1185	1259	1333	1406	1480	75
42	434	434	434	520	607	693	778	864	951	1036	1122	1210	1295	1380	1468	1554	1639	1726	86
48	437	434	495	595	693	791	889	986	1086	1185	1284	1380	1480	1579	1676	1775	1873	1971	99
54	492	447	558	667	778	889	1000	1110	1221	1333	1443	1554	1664	1775	1886	1996	2107	2216	111
60	545	495	618	741	864	986	1110	1233	1355	1480	1602	1726	1848	1971	2095	2216	2341	2463	124
66	600	545	679	815	951	1086	1221	1355	1490	1628	1763	1897	2033	2169	2305	2438	2575	2708	136
72	655	595	741	889	1036	1185	1333	1480	1628	1775	1923	2069	2216	2364	2513	2659	2807	2955	148
78	709	644	803	964	1122	1284	1443	1602	1763	1923	2082	2242	2402	2564	2723	2882	3043	3202	160
84	763	693	864	1036	1210	1380	1554	1726	1897	2069	2242	2416	2585	2758	2932	3103	3275	3447	173
90	815	741	926	1110	1295	1480	1664	1848	2033	2216	2402	2585	2771	2955	3140	3323	3510	3694	185
96	870	791	986	1185	1380	1579	1775	1971	2169	2364	2564	2758	2955	3152	3349	3546	3743	3939	197
102	925	840	1048	1259	1468	1676	1886	2095	2305	2513	2723	2932	3140	3349	3559	3768	3977	4185	209
108	978	889	1110	1333	1554	1775	1996	2216	2438	2659	2882	3103	3323	3546	3768	3988	4211	4431	222
114	1033	938	1174	1406	1639	1873	2107	2341	2575	2807	3043	3275	3510	3743	3977	4211	4444	4677	234
120	1086	986	1233	1480	1726	1971	2216	2463	2708	2955	3202	3447	3694	3939	4185	4431	4677	4922	247

A2 Framed Front Tilt
(Base Price)

- All Frames
- 2½", 3½", and 4½" Louvers
- Framed Standard Hinged Panels
- T-Posts, Divider Rails, Build-Out (for some applications) and Hardware

HEIGHT TO \ WIDTH TO	12"	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	EVERY 6" ADD
36"	$477	477	477	491	571	654	733	814	896	977	1059	1139	1220	1302	1383	1465	1545	1626	82
42	477	477	477	571	667	761	855	950	1045	1139	1233	1330	1423	1517	1613	1708	1801	1897	95
48	480	477	544	654	761	869	977	1084	1193	1302	1411	1517	1626	1735	1842	1951	2058	2166	109
54	541	491	613	733	855	977	1099	1220	1342	1465	1586	1708	1829	1951	2073	2193	2315	2435	122
60	599	544	679	814	950	1084	1220	1355	1489	1626	1760	1897	2031	2166	2302	2435	2572	2707	136
66	659	599	746	896	1045	1193	1342	1489	1637	1789	1937	2085	2234	2383	2533	2679	2830	2976	149
72	720	654	814	977	1139	1302	1465	1626	1789	1951	2113	2274	2435	2598	2761	2922	3085	3247	163
78	779	708	882	1059	1233	1411	1586	1760	1937	2113	2288	2464	2640	2818	2992	3167	3344	3519	176
84	838	761	950	1139	1330	1517	1708	1897	2085	2274	2464	2655	2841	3031	3222	3410	3599	3788	190
90	896	814	1018	1220	1423	1626	1829	2031	2234	2435	2640	2841	3045	3247	3450	3652	3857	4059	203
96	956	869	1084	1302	1517	1735	1951	2166	2383	2598	2818	3031	3247	3464	3680	3897	4113	4329	217
102	1016	923	1152	1383	1613	1842	2073	2302	2533	2761	2992	3222	3450	3680	3911	4141	4370	4599	230
108	1075	977	1220	1465	1708	1951	2193	2435	2679	2922	3167	3410	3652	3897	4141	4382	4627	4869	244
114	1135	1031	1290	1545	1801	2058	2315	2572	2830	3085	3344	3599	3857	4113	4370	4627	4884	5140	257
120	1193	1084	1355	1626	1897	2166	2435	2707	2976	3247	3519	3788	4059	4329	4599	4869	5140	5409	271

Notes
- Prices in the 12" column include a surcharge for narrow panels.
- For surcharges and other pricing details, see Pricing – Surcharges & Accessories**. Surcharges are added to the base price.
- For arch top and angle top panels, base price is determined by tallest overall height.
- Only FDC, FDCWC, Bi-Fold, and Bypass track frames include build-out at no additional charge. All other build-out options must be ordered as lineal materials.
- Additional freight charges apply. Contact Customer Service for current rates.

Product price only, not including freight, state/local taxes, measuring and installation, and other services associated with a custom installation.

A3 Unframed Concealed Tilt
(Base Price)

- Panels Only or with 2-Sided Hang Strip
- 2½", 3½", and 4½" Louvers
- Standard Hinged Panels
- T-Posts, Divider Rails, Build-Out (for some applications) and Hardware

HEIGHT TO \ WIDTH TO	12"	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	EVERY 6" ADD
36"	$500	500	500	514	598	685	767	853	938	1023	1108	1192	1277	1363	1448	1533	1617	1702	86
42	500	500	500	598	699	797	895	995	1094	1192	1290	1392	1490	1588	1688	1788	1886	1986	99
48	503	500	570	685	797	910	1023	1135	1249	1363	1477	1588	1702	1816	1928	2042	2154	2267	114
54	566	514	642	767	895	1023	1150	1277	1405	1533	1660	1788	1915	2042	2169	2295	2423	2549	127
60	627	570	711	853	995	1135	1277	1419	1559	1702	1842	1986	2126	2267	2410	2549	2692	2834	142
66	690	627	781	938	1094	1249	1405	1559	1714	1873	2027	2182	2339	2494	2651	2804	2962	3115	156
72	754	685	853	1023	1192	1363	1533	1702	1873	2042	2211	2381	2549	2719	2890	3059	3229	3399	170
78	816	742	924	1108	1290	1477	1660	1842	2027	2211	2395	2579	2763	2949	3131	3315	3500	3683	184
84	877	797	995	1192	1392	1588	1788	1986	2182	2381	2579	2779	2974	3172	3372	3569	3766	3965	198
90	938	853	1066	1277	1490	1702	1915	2126	2339	2549	2763	2974	3187	3399	3611	3822	4037	4248	213
96	1001	910	1135	1363	1588	1816	2042	2267	2494	2719	2949	3172	3399	3625	3851	4079	4304	4531	227
102	1064	966	1206	1448	1688	1928	2169	2410	2651	2890	3131	3372	3611	3851	4093	4334	4574	4813	241
108	1126	1023	1277	1533	1788	2042	2295	2549	2804	3059	3315	3569	3822	4079	4334	4586	4843	5096	255
114	1188	1079	1350	1617	1886	2154	2423	2692	2962	3229	3500	3766	4037	4304	4574	4843	5111	5379	269
120	1249	1135	1419	1702	1986	2267	2549	2834	3115	3399	3683	3965	4248	4531	4813	5096	5379	5661	283

A4 Framed Concealed Tilt
(Base Price)

- All Frames
- 2½", 3½", and 4½" Louvers
- Framed Standard Hinged Panels
- T-Posts, Divider Rails, Build-Out (for some applications) and Hardware

HEIGHT TO \ WIDTH TO	12"	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	EVERY 6" ADD
36"	$549	549	549	565	657	753	843	937	1031	1124	1218	1310	1403	1498	1591	1685	1777	1870	94
42	549	549	549	657	768	876	984	1093	1202	1310	1418	1530	1637	1745	1855	1965	2072	2182	109
48	553	549	626	753	876	1000	1124	1247	1372	1498	1623	1745	1870	1996	2119	2244	2367	2491	125
54	622	565	705	843	984	1124	1264	1403	1544	1685	1824	1965	2104	2244	2384	2522	2663	2801	140
60	689	626	781	937	1093	1247	1403	1559	1713	1870	2024	2182	2336	2491	2648	2801	2958	3114	156
66	758	689	858	1031	1202	1372	1544	1713	1883	2058	2228	2398	2570	2741	2913	3081	3255	3423	171
72	829	753	937	1124	1310	1498	1685	1870	2058	2244	2430	2616	2801	2988	3176	3361	3548	3735	187
78	897	815	1015	1218	1418	1623	1824	2024	2228	2430	2632	2834	3036	3241	3441	3643	3846	4047	202
84	964	876	1093	1310	1530	1745	1965	2182	2398	2616	2834	3054	3268	3486	3706	3922	4139	4357	218
90	1031	937	1171	1403	1637	1870	2104	2336	2570	2801	3036	3268	3502	3735	3968	4200	4436	4668	234
96	1100	1000	1247	1498	1745	1996	2244	2491	2741	2988	3241	3486	3735	3984	4232	4482	4730	4979	249
102	1169	1062	1325	1591	1855	2119	2384	2648	2913	3176	3441	3706	3968	4232	4498	4763	5026	5289	265
108	1237	1124	1403	1685	1965	2244	2522	2801	3081	3361	3643	3922	4200	4482	4763	5040	5322	5600	280
114	1305	1186	1484	1777	2072	2367	2663	2958	3255	3548	3846	4139	4436	4730	5026	5322	5617	5911	296
120	1372	1247	1559	1870	2182	2491	2801	3114	3423	3735	4047	4357	4668	4979	5289	5600	5911	6221	311

Notes
- Prices in the 12" column include a surcharge for narrow panels.
- For surcharges and other pricing details, see Pricing – Surcharges & Accessories**. Surcharges are added to the base price.
- For arch top and angle top panels, base price is determined by tallest overall height.
- Only FDC, FDCWC, Bi-Fold, and Bypass track frames include build-out at no additional charge. All other build-out options must be ordered as lineal materials.
- Additional freight charges apply. Contact Customer Service for current rates.

Product price only, not including freight, state/local taxes, measuring and installation, and other services associated with a custom installation.

Specialty Shape Pricing

- **Important Note!** All base prices are predicated on Ordered Dimensions.
- Round the ordered width of the specialty shape up to the nearest width shown on the appropriate chart. The price beneath that width is the suggested retail price.

Standard Shutter Pricing

- If a standard shutter is being ordered in combination with the specialty shape, price that standard shutter using the standard price charts, see Pricing – Price Grids℠.

Notes

- Due to the endless range of options available, special charges may apply for orders outside the published product specifications; contact Customer Service for a quote.

B1 Unframed Specialty Shapes
(Base Price)

- Hardware

WIDTH TO	30"	36	42	48	54	60	66	72	78	84	90	96	102
PERFECT ARCH (A1)	$960	1040	1280	1420	1605	1795	1985	2365	2640	2865	3105	3330	3560
QUARTER CIRCLE (A2) EXTENDED QUARTER CIRCLE (A2)	720	785	970	1135	1315								
CIRCLE (A3)	1890	2055	2515	2830	3180	3560	3960	4710	5265	5715	6185	6645	7100
EXTENDED EYEBROW (A4) EXTENDED ARCH (A4)	960	1040	1280	1420	1605	1795	1985	2365	2640	2865	3105	3330	3560
EYEBROW (A5)	960	1040	1280	1420	1605	1795	1985	2365	2640	2865	3105	3330	3560
EXTENDED QUARTER EYEBROW (A6)	720	785	970	1135	1315								
EXTENDED ANGLE (A7) ANGLE (A7)	720	785	970	1135	1315								
PENTAGON (A8)	960	1040	1280	1420	1605	1795	1985	2365	2640	2865	3105	3330	3560
OVAL (T1), CIRCLE (T2) HEXAGON (T3), OCTAGON (T4)	1890	2055											

B2 Framed Specialty Shapes
(Base Price)

- All Frames
- Hardware

WIDTH TO	30"	36	42	48	54	60	66	72	78	84	90	96	102
PERFECT ARCH (A1)	$1415	1545	1905	2135	2390	2675	2975	3540	3950	4290	4650	4990	5330
QUARTER CIRCLE (A2) EXTENDED QUARTER CIRCLE (A2)	1075	1165	1425	1700	1960								
CIRCLE (A3)	2815	3070	3770	4240	4765	5330	5935	7060	7885	8565	9260	9955	10645
EXTENDED EYEBROW (A4) EXTENDED ARCH (A4)	1415	1545	1905	2135	2390	2675	2975	3540	3950	4290	4650	4990	5330
EYEBROW (A5)	1415	1545	1905	2135	2390	2675	2975	3540	3950	4290	4650	4990	5330
EXTENDED QUARTER EYEBROW (A6)	1075	1165	1425	1700	1960								
EXTENDED ANGLE (A7) ANGLE (A7)	1075	1165	1425	1700	1960								
PENTAGON (A8)	1415	1545	1905	2135	2390	2675	2975	3540	3950	4290	4650	4990	5330
OVAL (T1), CIRCLE (T2) HEXAGON (T3), OCTAGON (T4)	2815	3070											

Notes

- For surcharges and other pricing details, see Pricing – Surcharges & Accessories℠. Surcharges are added to the base price.
- Additional freight charges apply. Contact Customer Service for current rates.

Product price only, not including freight, state/local taxes, measuring and installation, and other services associated with a custom installation.

Track System Surcharges
(Width-Based)

WIDTH TO	24"	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	EVERY 6" ADD
BI-FOLD	$175	215	255	295	335	375	415	455	495	535	575	615	655	695	735	775	815	40
BYPASS	380	420	460	500	540	580	620	660	700	740	780	820	860	900	940	980	1020	40
BYPASS OPEN LOUVER	535	610	685	760	835	910	985	1060	1135	1210	1285	1360	1435	1510	1585	1660	1735	75
BYPASS TRIPLE TRACK	625	700	775	850	925	1000	1075	1150	1225	1300	1375	1450	1525	1600	1675	1750	1825	75

Notes
- For stackback track configurations, first locate the base price for the shutter width and height. Next, use the stackback width to determine the track surcharge. Add this surcharge to the shutter base price to arrive at the total price for the stackback configuration. See Pricing – How to Price℠ and Stackback Design℠.
- Units with panel widths less than 27 1/2" may not be built with Controlled Close for Bypass depending on the configuration.

Arch Top and Angle Top Panel Surcharges
(Width-Based)

WIDTH TO	24"	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	EVERY 6" ADD
ANGLE TOP	$675	755	815	890	970	1045	1130	1210	1285	1375	1465	1555	1645	1735	1830	1925	2020	85
ARCH TOP	750	830	905	990	1075	1165	1250	1340	1420	1530	1630	1730	1825	1930	2030	2130	2230	95

Product price only, not including freight, state/local taxes, measuring and installation, and other services associated with a custom installation.

Design Option Surcharges
(Add to Base Price)

Café Shutters (One-, Two-, or Three-sided frames only)	Add 30% to base price grid
Café Shutters (Four-sided frames only)	Add 40% to base price grid
Café Shutters — Arch Top Frame	Add 50% to Framed base price grid
Café Shutters — Angle Top Frame	Add 40% to Framed base price grid
Double-Hung Shutters	Add 40% to base price grid
3½" Curved French Door Cut-Outs	Add $775 per cut-out
Rectangular and 5" Curved French Door Cut-Outs	Add $775 per cut-out
Stainless Steel Hardware (Hinges and screws)	Add $75 per unit (one continuous opening)
Arch Top Panel Single Build-Out	Add 10% to Framed base price grid
Arch Top Panel Double Build-Out	Add 20% to Framed base price grid
Casing Frame Spacer Build-Out	Add 10% to Framed base price grid
Build-Out for Framed and Unframed Specialty Shapes	Add 25% to specialty Framed base price grid for each build-out
Extension Pole	Add $110

Notes
- Due to the endless range of options available, special charges may apply for orders outside the published product specifications; contact Customer Service for a quote.

Deductions

FRAME ONLY (Mitered and hinged)	Deduct 75% from Framed base price grid

Product price only, not including freight, state/local taxes, measuring and installation, and other services associated with a custom installation.

Lineal Materials Pricing
Base Price Per Inch

LINEAL MATERIAL	SOLID
1 5/8" Traditional L-Frame (L61K)	$0.65
2 3/8" Traditional L-Frame (L63K)	1.12
2 7/8" Traditional L-Frame (L64K)	1.22
1 3/4" Contemporary L-Frame (L65K)	0.65
2 3/8" Contemporary L-Frame (L66K)	1.12
2 7/8" Contemporary L-Frame (L67K)	1.22
1 3/4" Traditional L-Frame (L68K)	0.65
Standard Z-Frame (Z62K)	1.19
Traditional Z-Frame (Z63K)	1.19
Contemporary Z-Frame (Z66K)	1.19
Contemporary Tilt-In Z-Frame (Z67)	0.44
Traditional Tilt-in Z-Frame (Z68K)	0.44
Casing Frame (C61)	1.31
Casing Frame Insert (C61I)	0.67
Casing Frame Spacer (TCS)	0.50
2 3/8" Traditional L-Frame Partial Trim Extension (L63KP)	1.55
2 3/8" Traditional L-Frame Full Trim Extension (L63KF)	1.55
2 7/8" Traditional L-Frame Partial Trim Extension (L64KP)	4.62
2 7/8" Traditional L-Frame Full Trim Extension (L64KF)	4.62
2 3/8" Contemporary L-Frame Partial Trim Extension (L66KP)	1.55
2 3/8" Contemporary L-Frame Full Trim Extension (L66KF)	1.55
2 7/8" Contemporary L-Frame Partial Trim Extension (L67KP)	4.62
2 7/8" Contemporary L-Frame Full Trim Extension (L67KF)	4.62
Sill Frame 1/2" Light Stop (S12)	0.41
Sill Frame 5/8" Light Stop (S58)	0.41
Rectangular Stile (ST)	0.93

Lineal Materials Pricing
Base Price Per Inch

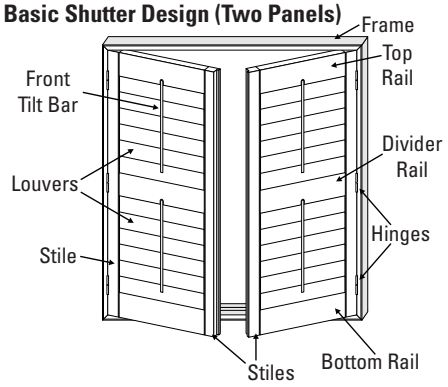
LINEAL MATERIAL	SOLID
Traditional T-Post 1/2" Light Stop (T12T)	1.19
Traditional T-Post 5/8" Light Stop (T58T)	1.19
Contemporary T-Post 5/8" Light Stop (T58N)	1.19
Bi-Fold Track Frame (BF)	0.95
Bypass Track Frame (BP)	2.33
Bypass Open Louver/Triple Track (BO/BT)	4.88
Hang Strip/Build-Out (HS)	0.44
Trim Hang Strip/Build-Out (THS)	0.44
1/2" Light Stop/Trim Strip (LS12)	0.19
5/8" Light Stop/Trim Strip (LS58)	0.20
2 1/2" Standard Valance (SV2)	0.50
5 3/8" Standard Valance (SV5)	0.95
Decorative Valance (DEV)	3.00
Bottom Track Spacer (BTS)	0.39
Quarter Round (QTR)	0.23
Bi-Fold/Bypass Track – Aluminum (TRK)	0.54
Bottom Track – Aluminum (BTMTRK)	0.40
#6 x 1 5/8" Installation Screw – Black (ISW1)	6.23 per quantity of 25
#6 x 1 5/8" Installation Screw – White (ISW1W)	6.23 per quantity of 25
#6 x 2 1/4" Installation Screw – Black (ISW2)	6.23 per quantity of 25
#6 x 2 1/4" Installation Screw – White (ISW2W)	6.23 per quantity of 25
#8 x 3" Installation Screw – Black (ISW3)	13.29 per quantity of 25
#8 x 3 1/2" Installation Screw – Black (ISW4)	24.07 per quantity of 25

Notes
- Minimum order for lineal materials or parts alone is $30 net.
- Lineal material frames can be square cut or miter cut.
- There is an additional $75 net surcharge for curved lineal material not requested with an original order.
- Lineal materials not ordered with the original order may vary in color.

Shutter Terminology

The basic shutter assembly is a panel hinged to a **frame**. The panel consists of **louvers** which pivot open and closed, with **stiles** on the sides, and **rails** on the top and bottom.

Basic Shutter Design (Two Panels)



Louver Tilt Systems

Shutter louvers open and close using a tilt bar linked to the louvers. LEVOLOR® PREMIER™ Composite Shutters have fixed louver spacing.

Front Tilt

A front tilt bar is located on the front center of the panel, and is connected to the edge of the louvers with staples. Open and close louvers together using the tilt bar.

A standard rear clearance of 1/4" is recommended for louver operation.

Important:

Do not open or close the shutter panels by pulling or pushing on the tilt bar.

Concealed Tilt

The tilt mechanism is fully enclosed within the stile, providing expanded view-through with no external tilt bar.

Light Control and Privacy

Divider Rail

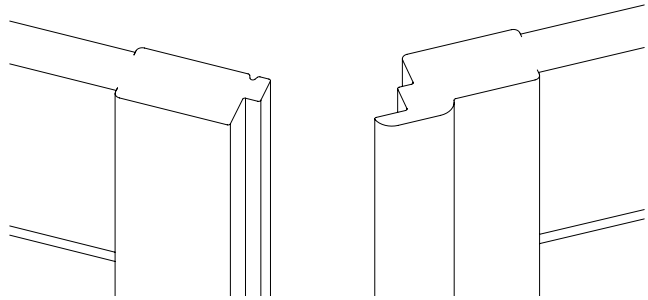
A divider rail is a fixed rail inserted between louvers for additional panel strength. Divider rails may also be used to create upper and lower louver sections for increased operational flexibility or privacy, or to cover horizontal window features such as sashes or mullions.

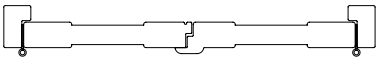
Louver Sections

A louver section is a group of louvers within a panel that tilt in unison. Ordering a divider rail or split tilt creates multiple louver sections which are operated independently.

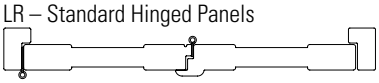
Astragal

Astragal is a flange to cover the gap where two shutter panels meet. It helps to minimize the light passing between rabbeted stiles, and conceal uneven panel gaps due to out-of-square openings. It is always located on the front of the panel, and is placed as indicated in the example drawings below.

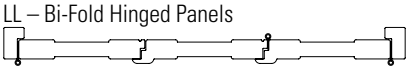




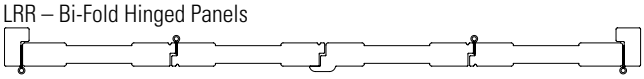
LR – Standard Hinged Panels



LL – Bi-Fold Hinged Panels



LRR – Bi-Fold Hinged Panels

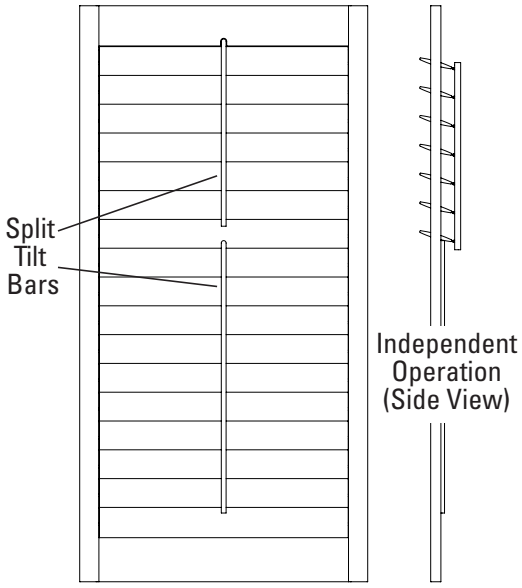


LLRR – Bi-Fold Hinged Panels

Split Tilt

Split tilt can be specified for increased operational flexibility and privacy.

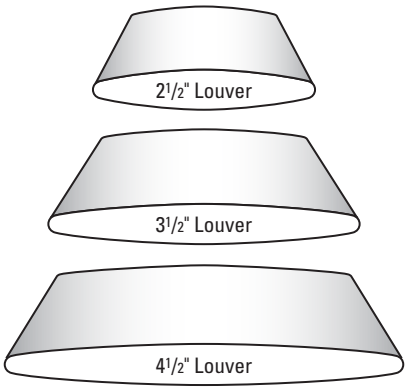
- Split tilt can be specified on panels with or without divider rails.
- Enter split tilt height on the order form to indicate the desired split tilt location.
- Split front tilt bars can limit range of movement for both top section and bottom section.



Louver Options

Louver Sizes

Three louver sizes are available: 2 1/2", 3 1/2", and 4 1/2". This gives consumers a choice of scale for different sized windows and rooms.



Louver Closure

With Composite Shutters, standard louver closure is in the upward position only. Optional is up/down closure, where the louvers can be closed upward or downward.

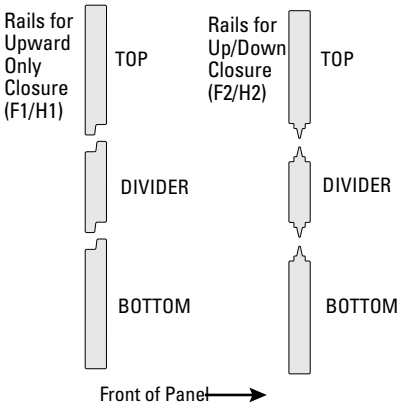
When upward only closure is ordered, louvers will not close completely in the downward position.

On shutters with front tilt and upward only closure, a mouse hole will be placed in the top rail to allow space for the tilt bar when louvers are in the closed position.

Indicate the customer's preference on the order form:

- F1: Front tilt, upward only closure
- F2: Front tilt, up/down closure
- H1: HiddenTilt™, upward only closure
- H2: HiddenTilt, up/down closure

Different rails are used for upward only closure than for up/down closure, as shown below.



Product Color Options

Specify color number on the order form.

- 6710 Snowfall
- 6750 Dove White
- 6751 Antique White
- 6756 Vanilla Cream

Shutter Hinges

Hinges are available in a range of colors and finishes to coordinate with shutter color and room décor.

All shutter panels come standard with removable hinge pins packed in the hardware.

Hinge Color Options

Hinges can coordinate or contrast with the shutter. Specify hinge color number on the order form. Note that stainless steel hinges are available for a surcharge. Recommended product colors are shown in parentheses.

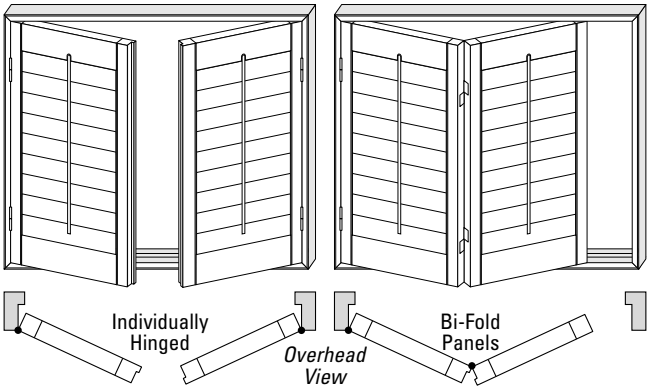
- 007 Antique Brass Finish
- 008 Brushed Nickel Finish
- 009 White (6750 and 6751)
- 010 Off-White (6756)
- 011 Stainless Steel
- 014 Polar White (6710)
- 022 Venetian Bronze
- 023 Satin Black

Standard Hinged Panels (SH)

Standard hinged panels consist of one or more shutter panels hinged in a variety of configurations. Single panels can be individually hinged or two panels may be hinged together in a Bi-Fold panel design. Although unframed shutters are available, frames help compensate for out-of-square openings, offer superior light blockage, and add a decorative style to the window or door opening.

Some of the more common types of standard hinged panels are illustrated in the Standard Hinged Panels℠ section.

Standard hinged panels are also available in a variety of special applications, including French door shutters, café, and double-hung shutters, and shutters for bay and corner windows. These special applications are described in detail beginning with French Doors℠.



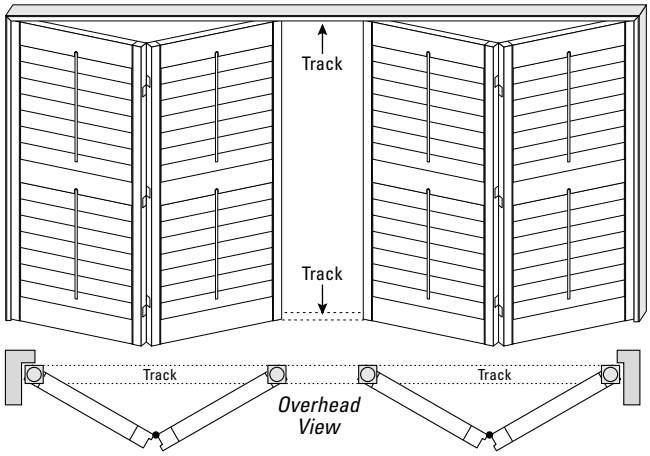
Standard Hinged Panel Examples

Bi-Fold Track (BF)

Bi-Fold track configurations allow up to six panels to be hinged together. Panels are connected to a top track which both supports the panels and guides their folding movements. Panels must be hinged together in multiples of two.

A special Bi-Fold Track Frame is used with Bi-Fold track configurations. The frame accommodates the track and minimizes light leaks. The track may also be attached directly to the ceiling or inside the window opening without a frame. A bottom floor track is recommended for all Bi-Fold track configurations to minimize panel sag and keep the panels from swinging in and out of the opening.

Possible panel arrangements in a Bi-Fold track configuration are illustrated in Bi-Fold Track Configurations℠.



Bi-Fold Track Example

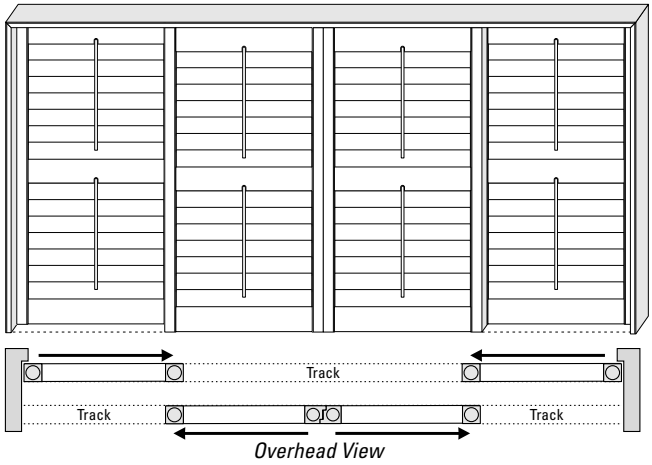
Bypass Track (BP)

Shutter panels in a Bypass track configuration are not hinged. Instead, they traverse on top tracks to stack and close. Two or three tracks are required so that the panels can slide past each other.

The tracks can be attached to a Bypass Track Frame or directly to the ceiling or inside the opening without a frame. Typically in door openings, the frames are three-sided with floor guides.

Controlled Close for Bypass is a mechanism for opening/closing bypass panels. It automatically slows a panels as it approaches the frame on either side of the unit, and gently brings it up against the frame. Controlled Close for Bypass comes standard on Bypass, Open Bypass, and Bypass Triple Track Systems.

Panel configurations for Bypass track configurations are illustrated in Bypass Track Configurations℠.



Bypass and Bypass Open Louver Track Example

Bypass Open Louver Track (BO)

The Bypass Open Louver track configuration is similar to the Bypass track configuration, except it has additional projection so that louvers can be opened when the panels are positioned in front of one another. A maximum of two tracks is allowed with this configuration.

Bypass Triple Track (BT)

The Bypass Triple Track configuration uses the same frame as the Bypass Open Louver configuration, but with three tracks instead of two. Available in select panel configurations, the use of three tracks increases the view to two-thirds of the opening instead of one-half with a standard Bypass track configuration.

Arch Top/Angle Top Panels (ART/ANT)

Arch Top and Angle Top panels are simply standard hinged panels with an arched or angled top. Measuring and operation differ slightly, however, so be sure to see Arch Top and Angle Top Panels℠ for information about these panel configurations.

Specialty Shapes (A1 to A8 and T1 to T4)

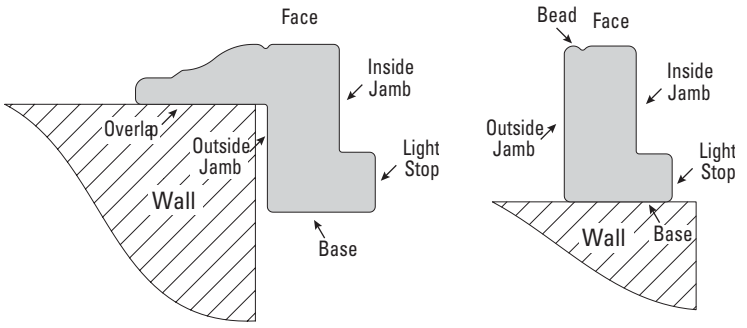
Composite Shutters include a wide variety of specialty shapes, including eight shapes with sunburst louvers and four shapes with horizontal louvers. Refer to Specialty Shapes℠.

Frames and Louver Clearance

Frame Terminology

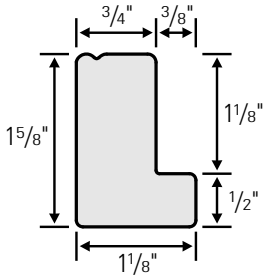
Common frame terminology is shown in the illustrations at right.

- Inside Mount: Frame sits inside the window opening either overlapping the wall (Z frame) or flush with the wall (L frame).
- Outside Mount: Frame sits on the wall or existing trim outside the window opening.



Inside Mount (IM) Outside Mount (OM)

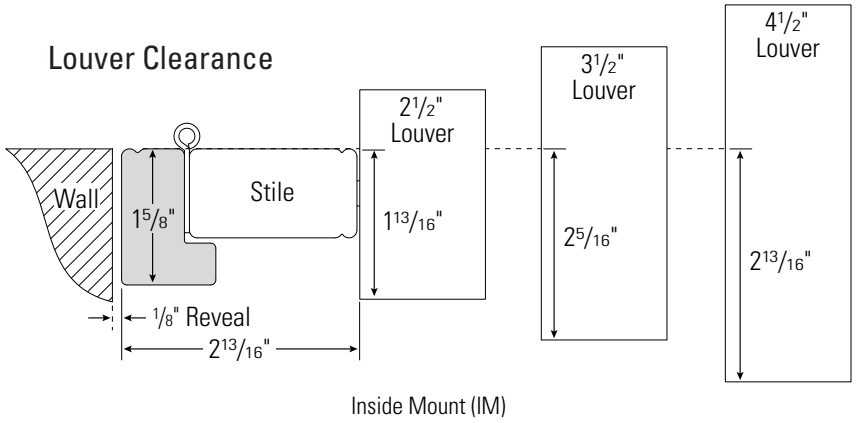
1⅝" Traditional L-Frame (L61K)



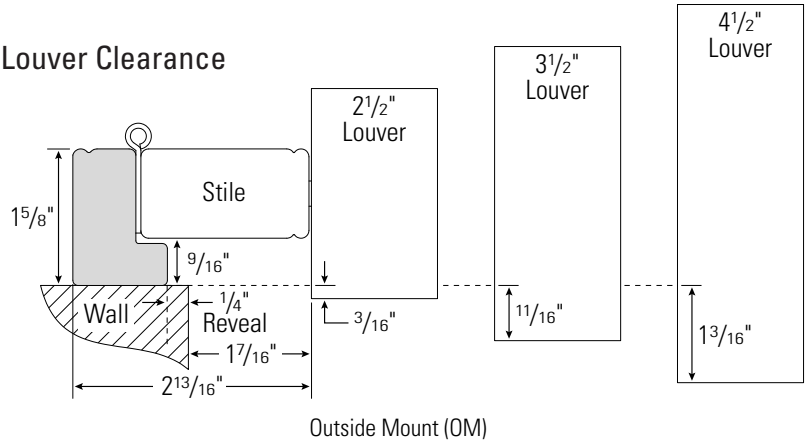
Features

As an inside mount, the frame is installed directly into the window opening. It may be mounted at various depths within the opening, depending on clearance.
As an outside mount, the frame can be mounted on the outside perimeter of the window opening.

- Mounting type: inside or outside mount
- Flush inside mounting depth: 1⅝" plus louver clearance if necessary
- Minimum flat outside mounting surface: 1⅛"
- Available combinations: Casing Frame, Sill Frame ½" Light Stop, T-Post ½" Light Stop, and ½" Light Stop/Trim Strip.

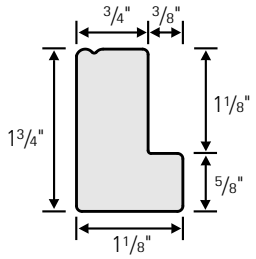


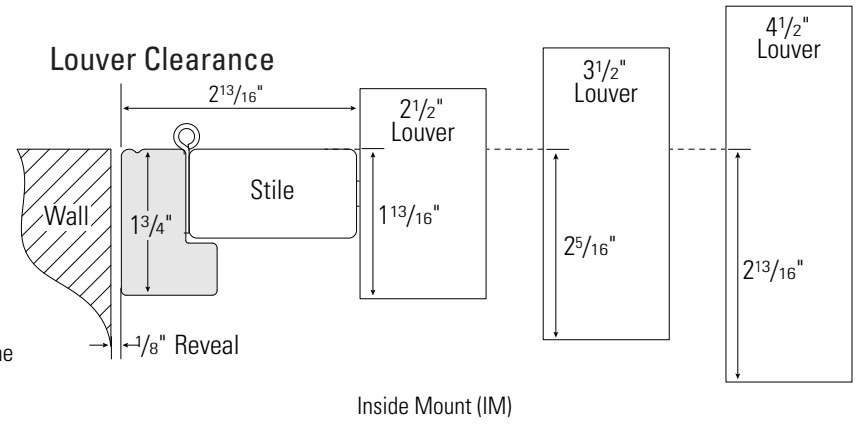
Inside Mount (IM)



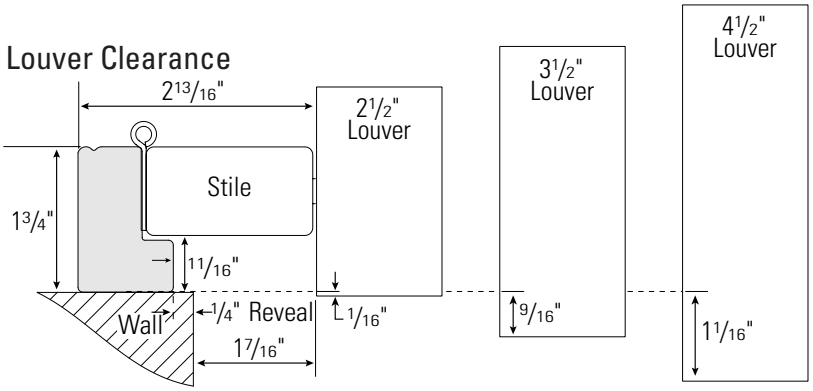
Outside Mount (OM)

1 3/4" Traditional L-Frame (L68K)





Inside Mount (IM)



Outside Mount (OM)

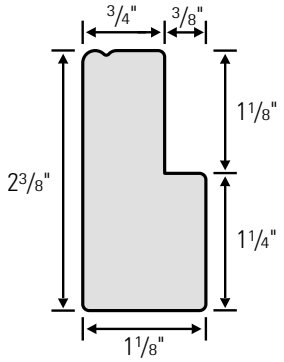
Features

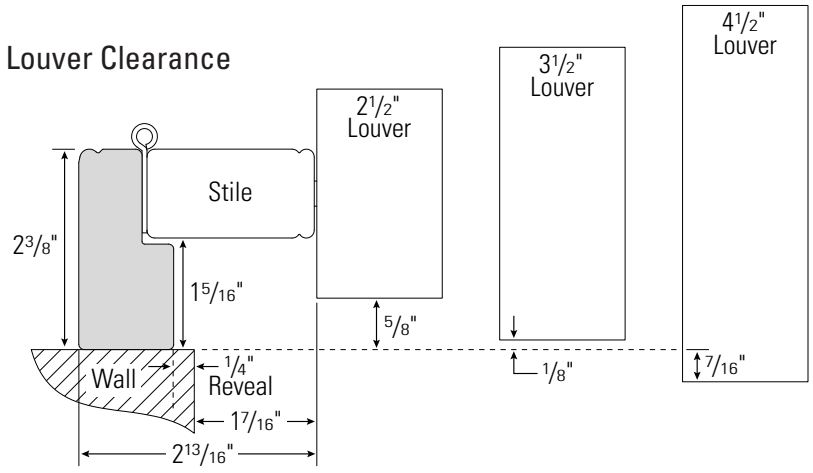
As an inside mount, the frame is installed directly into the window opening. It may be mounted at various depths within the opening, depending on clearance.

As an outside mount, the frame can be mounted on the outside perimeter of the window opening.

- Mounting type: inside or outside mount
- Flush inside mounting depth: 1 3/4" plus louver clearance if necessary
- Minimum flat outside mounting surface: 1 1/8"
- Available combinations: Traditional Tilt-In Z-Frame, Sill Frame 5/8" Light Stop, T-Post 5/8" Light Stop, and 5/8" Light Stop/Trim Strip

2 3/8" Traditional L-Frame (L63K)





Outside Mount (OM)

Features

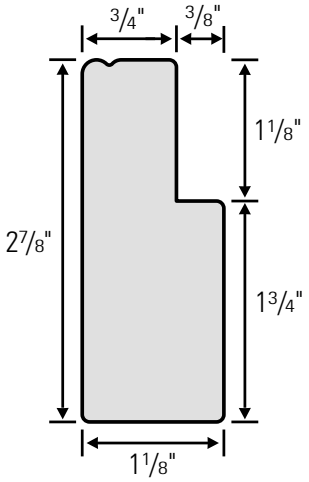
The 2 3/8" Traditional L-Frame is an extended version of the 1 5/8" Traditional L-Frame. The distance from the light stop to the base is 3/4" greater. These dimension differences make the 2 3/8" Traditional L-Frame an ideal choice for French doors.

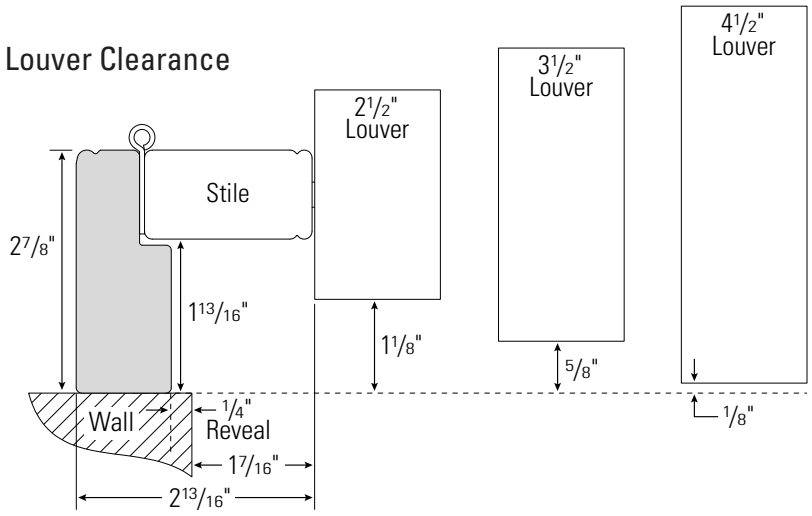
- Mounting type: inside or outside mount
- Flush inside mounting depth: 2 3/8" plus louver clearance if necessary
- Minimum flat outside mounting surface: 1 1/8"
- Available combinations: none

Notes

- The 2 3/8" Traditional L-Frame and 2 7/8" Traditional L-Frame are not compatible with the Sill Frame due to the difference in projection.

2⁷⁄₈" Traditional L-Frame (L64K)





Outside Mount (OM)

Features

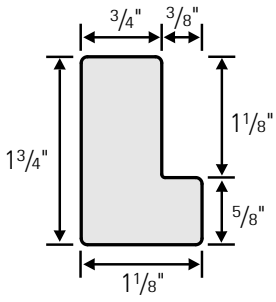
The 2⁷⁄₈" Traditional L-Frame is an extended version of the 2³⁄₈" Traditional L-Frame. The base is ¹⁄₂" deeper making this frame an ideal choice for French doors with 4¹⁄₂" louvers with Front Tilt.

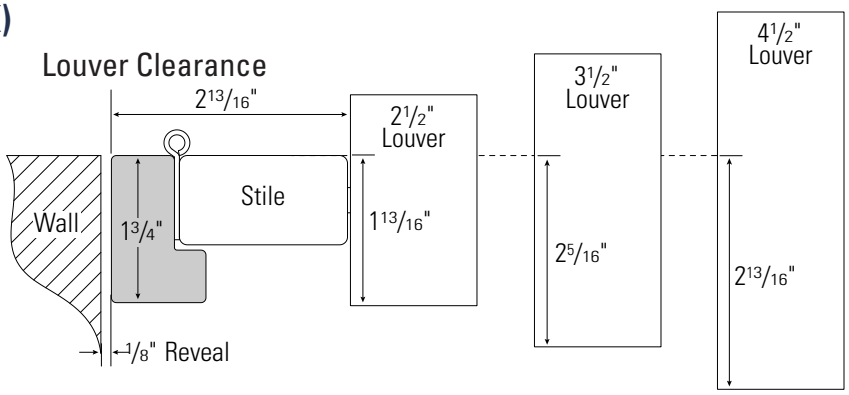
- Mounting type: inside or outside mount
- Flush inside mounting depth: 2⁷⁄₈" plus louver clearance if necessary
- Minimum flat outside mounting surface: 1¹⁄₈"
- Available combinations: none

Notes

- The 2³⁄₈" Traditional L-Frame and 2⁷⁄₈" Traditional L-Frame are not compatible with the Sill Frame due to the difference in projection.

1³⁄₄" Contemporary L-Frame (L65K)





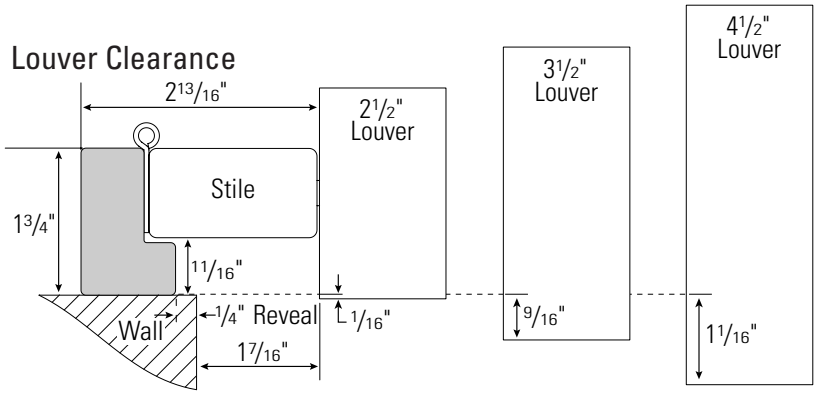
Inside Mount (IM)

Features

As an inside mount, the frame is installed directly into the window opening. It may be mounted at various depths within the opening, depending on clearance.

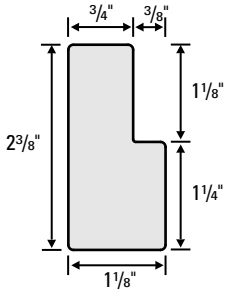
As an outside mount, the frame can be mounted on the outside perimeter of the window opening.

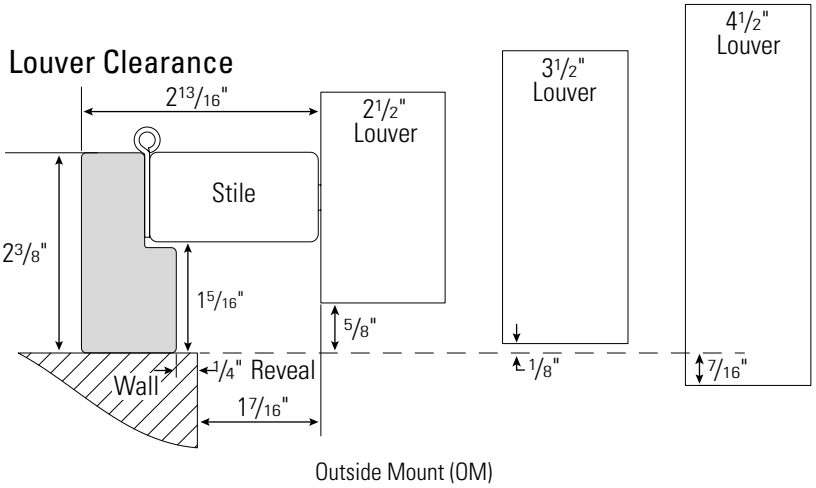
- Mounting type: inside mount
- Minimum mounting depth: 1⁵⁄₁₆" plus louver clearance if necessary
- Available combinations: 1³⁄₄" Contemporary L-Frame, Sill Frame ⁵⁄₈" Light Stop, T-Post ⁵⁄₈" Light Stop, and ⁵⁄₈" Light Stop/Trim Strip



Outside Mount (OM)

2 3/8" Contemporary L-Frame (L66K)





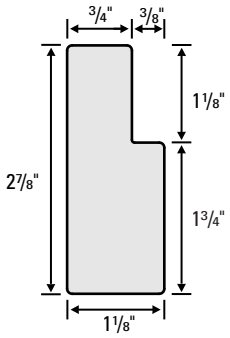
Outside Mount (OM)

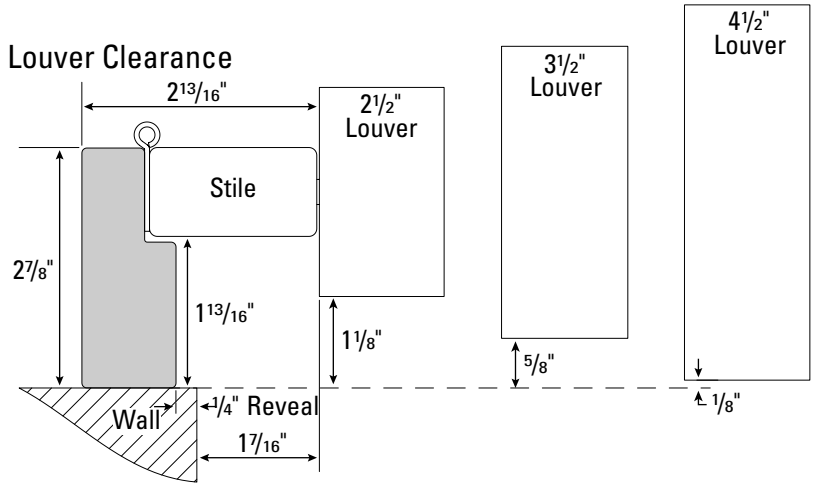
Features

The 2 3/8" Contemporary L-Frame is an extended version of the 1 3/4" Contemporary L-Frame. The taller height of the 2 3/8" Contemporary L-Frame makes it an ideal choice for French doors.

- Mounting type: inside or outside mount
- Flush inside mounting depth: 2 3/8" plus louver clearance if necessary
- Minimum flat outside mounting surface: 1 1/8"
- Available combinations: none

2 7/8" Contemporary L-Frame (L67K)





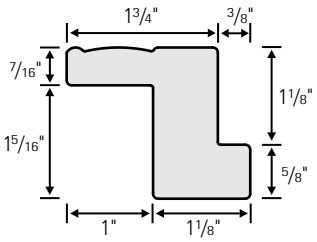
Outside Mount (OM)

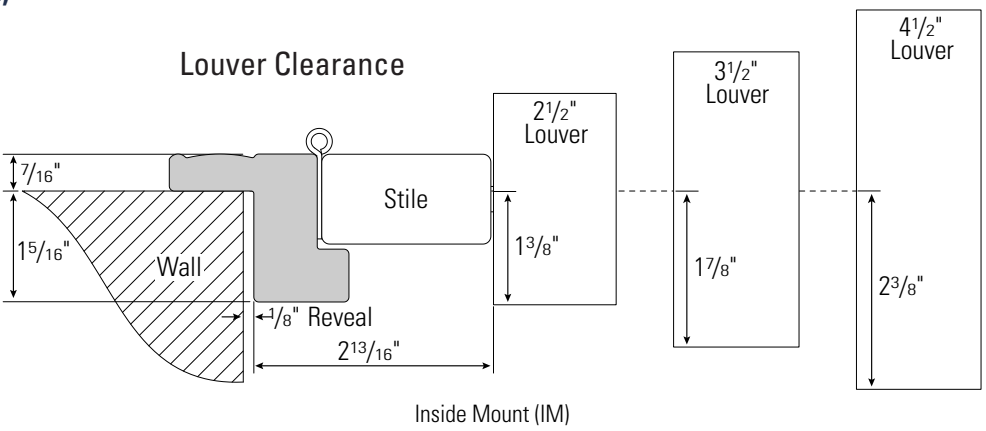
Features

The 2 7/8" Contemporary L-Frame is an extended version of the 2 3/8" Contemporary L-Frame. The taller height of the 2 7/8" Contemporary L-Frame makes it an ideal choice for French doors.

- Mounting type: inside or outside mount
- Flush inside mounting depth: 2 3/8" plus louver clearance if necessary
- Minimum flat outside mounting surface: 1 1/8"
- Available combinations: none

Standard Z-Frame (Z62K)





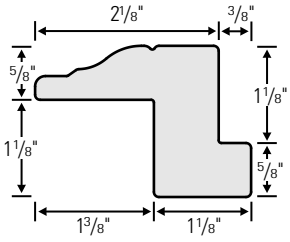
Inside Mount (IM)

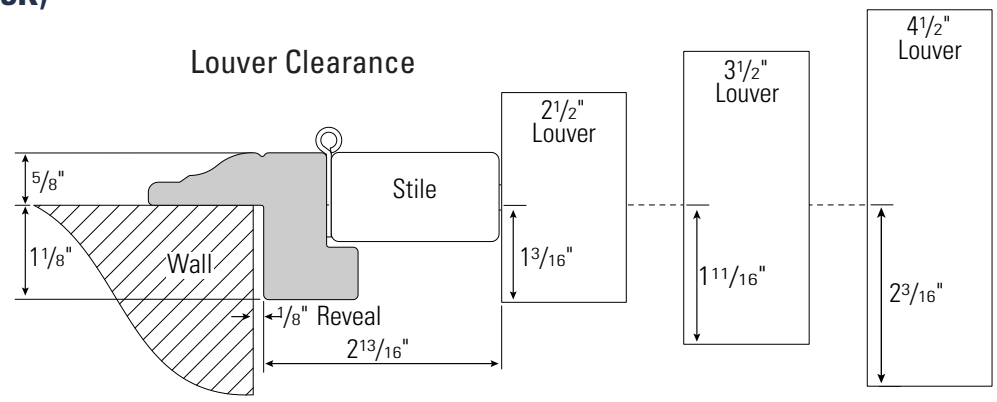
Features

The Standard Z-Frame gives the window a finished look by providing a 1 3/4" wide frame around the opening. It is installed inside the window opening at a depth of 1 5/16". The face provides an overlap of 1" to accommodate out-of-square windows.

- Mounting type: inside mount
- Minimum mounting depth: 1 5/16" plus louver clearance if necessary
- Available combinations: 1 3/4" Contemporary L-Frame, Sill Frame 5/8" Light Stop, T-Post 5/8" Light Stop and 5/8" Light Stop/Trim Strip

Traditional Z-Frame (Z63K)





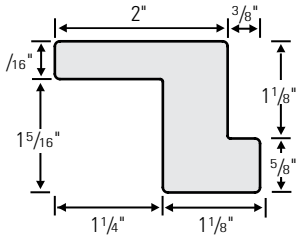
Inside Mount (IM)

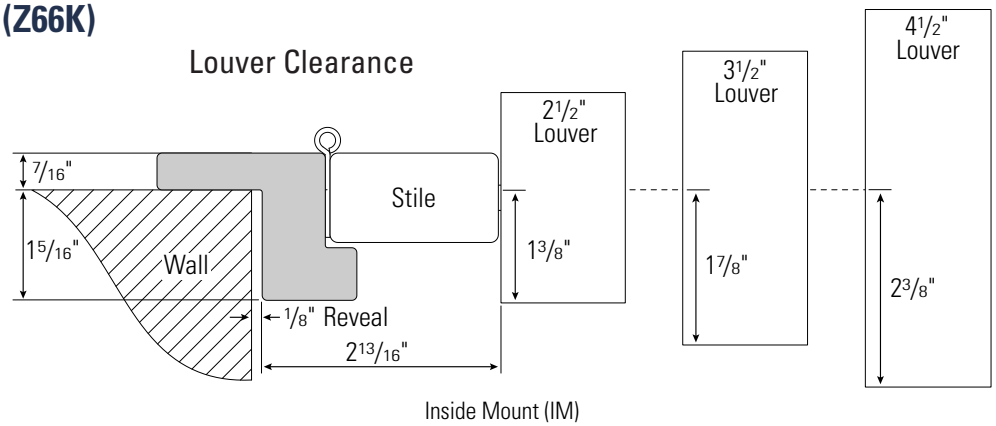
Features

The 2 1/8" face of the Traditional Z-Frame is designed to coordinate with most trim and molding. It is installed inside the window opening at a depth of 1 1/8". The face provides an overlap of 1 3/8" to accommodate out-of-square windows.

- Mounting type: inside mount
- Minimum mounting depth: 1 1/8"plus louver clearance if necessary
- Available combinations: 1 3/4" Contemporary L-Frame, Sill Frame 5/8" Light Stop, T-Post 5/8" Light Stop and 5/8" Light Stop/Trim Strip

Contemporary Z-Frame (Z66K)





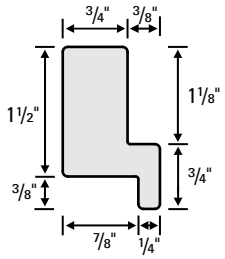
Inside Mount (IM)

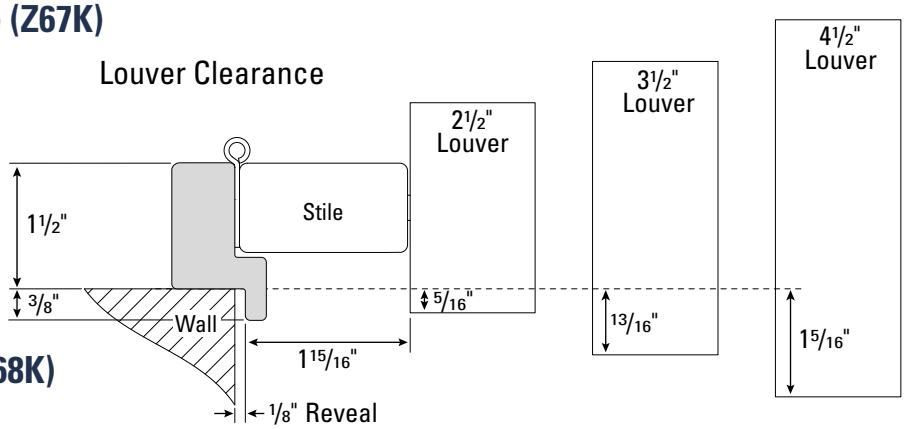
Features

The face of the Contemporary Z-Frame provides a clean and sleek aesthetic. It is installed inside the window opening at a depth of 1 5/16". The face provides an overlap of 1 1/4" to accommodate out-ofsquare windows.

- Mounting type: inside mount
- Minimum mounting depth: 1" plus louver clearance if necessary
- Available combinations: 1 3/4" Contemporary L-Frame, Sill Frame 5/8" Light Stop, T-Post 5/8" Light Stop, and 5/8" Light Stop/Trim Strip

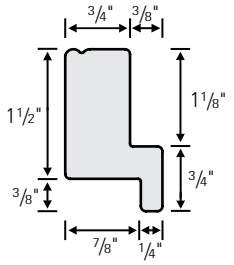
Contemporary Tilt-In Z-Frame (Z67K)





Inside Mount (IM)

Traditional Tilt-In Z-Frame (Z68K)



Features

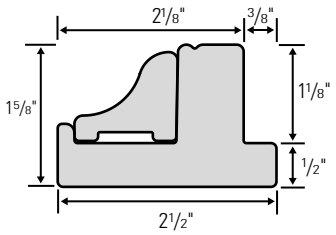
Ideal for windows that tilt inward, the Tilt-In Z-Frame is installed inside the window opening or on top of the window casing at a minimal depth of 3/8". It provides a 3/4" wide frame around the opening, giving the window a finished look. The frame's overlap of 7/8" easily accommodates out-of-square windows.

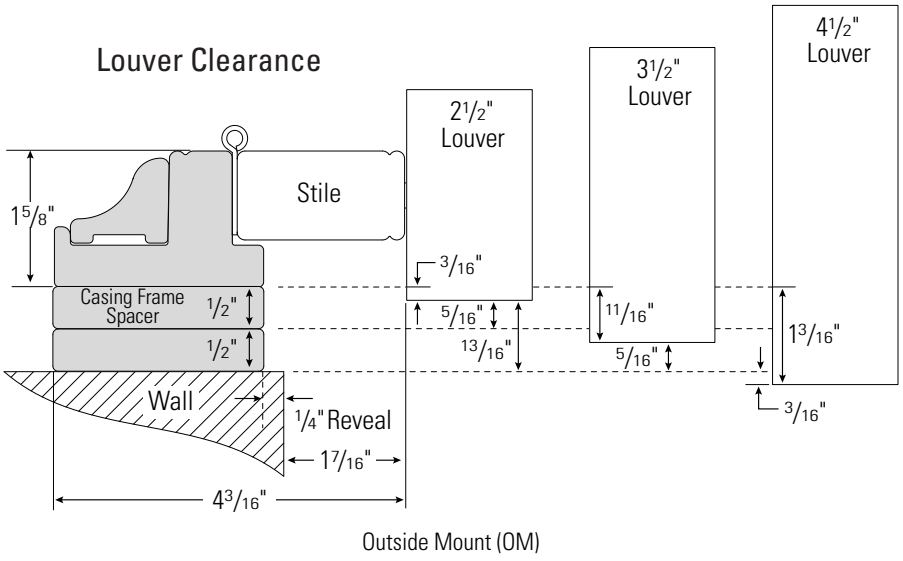
- Mounting type: inside mount
- Minimum mounting depth: 3/8" plus louver clearance if necessary
- Contemporary available combinations: 1 3/4" Contemporary L-Frame, Sill Frame 5/8" Light Stop, Contemporary T-Post 5/8" Light Stop, and 5/8" Light Stop/ Trim Strip.
- Traditional available combinations: 1 3/4" Traditional L-Frame, Sill Frame 5/8" Light Stop, Traditional T-Post 5/8" Light Stop, and 5/8" Light Stop/Trim Strip.

Notes

- The combinations of the Traditional and Contemporary Tilt-In Z-Frame and L frame light stops will not match up on the rear of the shutter.

Casing Frame (C61)





Outside Mount (OM)

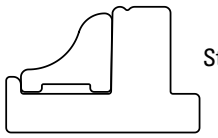
Features

The Casing Frame is designed to be mounted on the outside perimeter of the window opening to create the look of a decorative molding. Its base of 21/2" allows it to be mounted over molding in many cases. This frame includes an insert that covers screws or nails used to mount the frame, reducing the need for touch-up. For additional frame projection, order the Casing Frame Spacer as build-out or lineal material (see Pricing – Surcharges & Accessories).

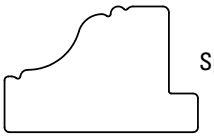
- Mounting type: outside mount
- Minimum flat outside mounting surface: 2 1/2"
- Available combinations: Standard L-Frame, Sill Frame 1/2" Light Stop, T-Post 1/2" Light Stop, and 1/2" Light Stop/Trim Strip

Casing Frame Standard vs Specialty

For Specialty Shapes, the Casing Frame is a solid profile with no insert.

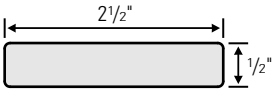


Standard Hinged Panels



Specialty Shapes

Casing Frame Spacer (TCS)

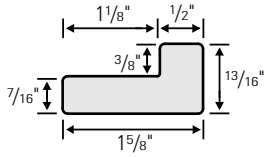


Features

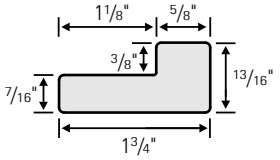
The Casing Frame Spacer can be ordered as build-out or lineal material to provide more projection. A surcharge is applied when ordered as build-out.

- Dimensions: 2 1/2" x 1/2"
- One build-out equals 1/2"
- Two build-outs equal 1"

Sill Frame



Sill Frame 1/2" Light Stop (S12)



Sill Frame 5/8" Light Stop (S58)

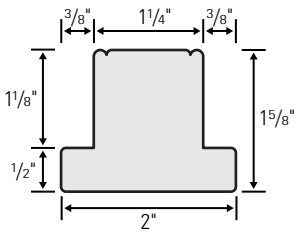
Features

The Sill Frame is recommended for inside mount frames resting on a sill. It mounts to the window sill to prevent light leakage and provides a finishing touch.

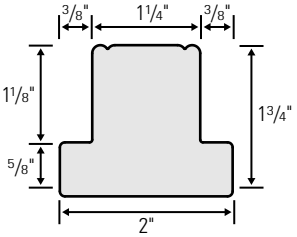
Notes

- Mounting type: sill mount
- Sill Frame 1/2" Light Stop — Available combinations: Standard L-Frame, Casing Frame, T-Post 1/2" Light Stop and 1/2" Light Stop/Trim Strip
- Sill Frame 5/8" Light Stop — Available combinations: 1 3/4" Traditional L-Frame, 1 3/4" Contemporary L-Frame, Standard Z-Frame, Colonial Z-Frame, Traditional Z-Frame, Contemporary Z-Frame, Tilt-In Z-Frame, T-Post 5/8" Light Stop and 5/8" Light Stop/Trim Strip
- The Sill Frame is not compatible with Trim L-Frame, Trim L-Frame + 1/2" Partial Trim Extension and Trim L-Frame + 1" due to the difference in projection.

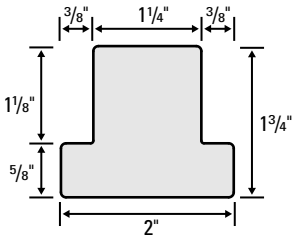
T-Post



Traditional T-Post
1/2" Light Stop (T12T)



Traditional T-Post
5/8" Light Stop (T58T)



Contemporary T-Post
5/8" Light Stop (T58N)

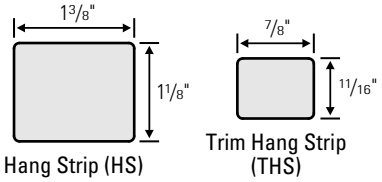
Features

T-Posts are vertical components of the shutter frame that separate the frame into multiple panel sets. Shutter panels are hinged within each set. T-Posts allow for placement of more panels (or panel sets) within the same opening, and add structural integrity to a shutter.

Notes

- Traditional T-Post 1/2" Light Stop — Available combinations: 1 5/8" Traditional L-Frame, Casing Frame, Sill Frame 1/2" Light Stop and 1/2" Light Stop/Trip Strip
- Traditional T-Post 5/8" Light Stop — Available combinations: 1 3/4" Traditional L-Frame, Traditional Tilt-In Z-Frame, Sill Frame 5/8" Light Stop, and 5/8" Light Stop/Trim Strip
- Modern T-Post 5/8" Light Stop — Available combinations: 1 3/4" Contemporary L-Frame, Standard Z-Frame, Traditional Z-Frame, Contemporary Z-Frame, Contemporary Tilt-In Z-Frame, Sill Frame 5/8" Light Stop, and 5/8" Light Stop/Trim Strip
- Light Stop and 5/8" Light Stop/Trim Strip T-Posts can be used with the Trim L-Frame Partial Trim Extension and Trim L-Frame + 1/2" Partial Trim Extension; however, the back of the T-Post will not be flush with the back of the frame.
- Vertical T-Posts are not recommended with three-sided or café applications due to possible lack of a stable mounting surface.
- Vertical T-Posts are recommended on standard hinged, bi-fold panels where the width is greater than the height. Example: LLRR should be ordered as LRTLR.
- T-Posts are used horizontally in continuous framed specialty applications. T-Posts can also be used horizontally in double-hung applications.

Hang Strip/Build-Out (HS/THS)



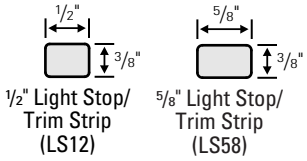
Features

The Hang Strip is an alternative mounting method. The Hang Strip (HS) can be mounted to the side (HSS) or behind (HSB) the panels as IM or OM. The Trim Hang Strip (THS) is only available as HSB for (IM). The 11/16" side is attached to the window jamb on an IM application. Wrap around hinges are used for all HSB applications. See the louver clearance information starting with "Louver Clearances" on page 26 for hinge placement.
On inside mount applications, the Hang Strip will be 1/16" shorter than the ordered height to ensure space for mounting to the inside of the opening. Light Stop is recommended to minimize the light gaps around panels.
The Hang Strip can be used as a build-out for extra projection of Bi-Fold and Bypass Frames. Up to two build-outs can be used. The Hang Strip is also used with French door (FD) applications (see "Louver Clearances" on page 26).

Notes

- Hang Strip (HS) Face width: 1 3/8"
- Trim Hang Strip (THS) Face width: 7/8"
- Hang Strips used with wrap-around hinges may result in panel sag. Bi-Fold panels greatly increase the chance of this occurring.

Light Stop/Trim Strip (LS12 and LS58)



Features

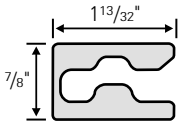
When needed, Light Stop/Trim Strip is used to finish an installation when ordered as lineal material and as build-out for FDC and FDCWC.

Notes

- 1/2" Light Stop Dimensions: 1/2" x 3/8"
- 5/8" Light Stop Dimensions: 5/8" x 3/8"
- All frames are designed with integrated light stops.
- For Hang Strip inside mount applications, or on sides with no frame, Light Stop is recommended to minimize the light gaps around panels. It must be ordered in the Frame Detail.
- Light Stop is not included as standard for tops of café units, track configurations or 3D applications.
- Additional Light Stop/Trim Strip, Hang Strip or Trim Hang Strip may be ordered as lineal material for finishing or detailing the installation.

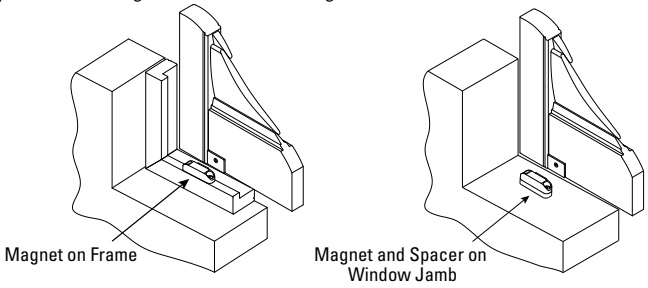
Hinge Shim

A thin piece of plastic designed to fit between the hinge and the mounting surface and aid in panel alignment.



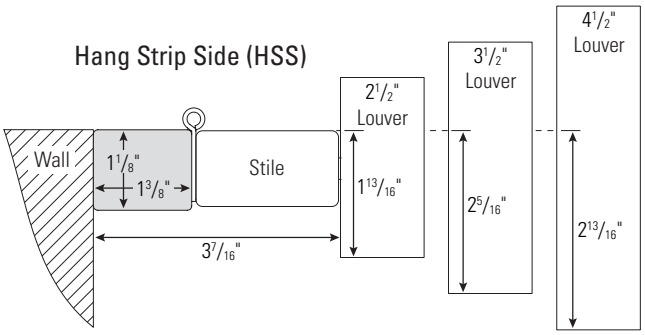
Magnets

Panels are held closed by using magnets. Magnets are available pre-installed or shipped separately to install on site.
When Light Stop is not ordered, a magnet spacer will be provided to position the magnet at the correct height.



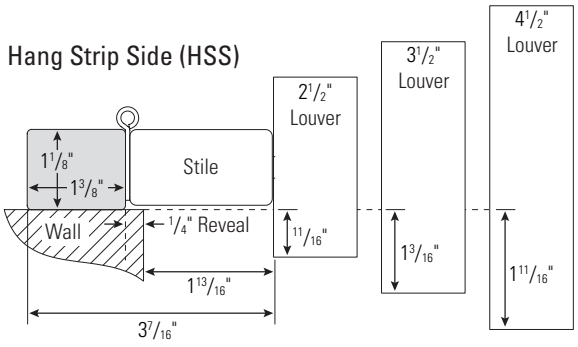
Louver Clearances

Hang Strip Side (HSS)



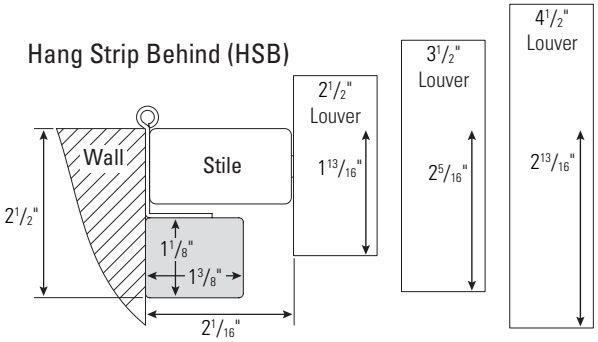
Inside Mount (IM)

Hang Strip Side (HSS)



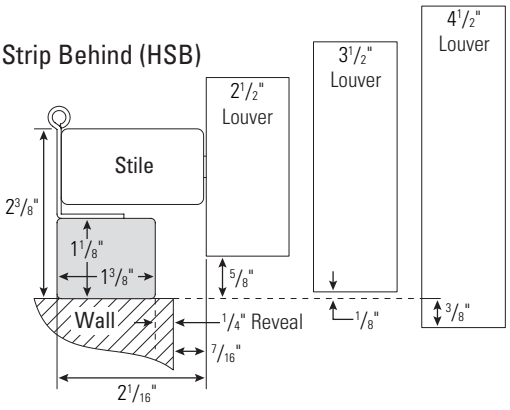
Outside Mount (OM)

Hang Strip Behind (HSB)



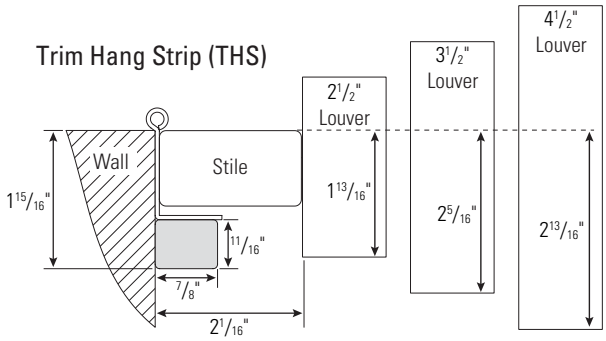
Inside Mount (IM)

Hang Strip Behind (HSB)

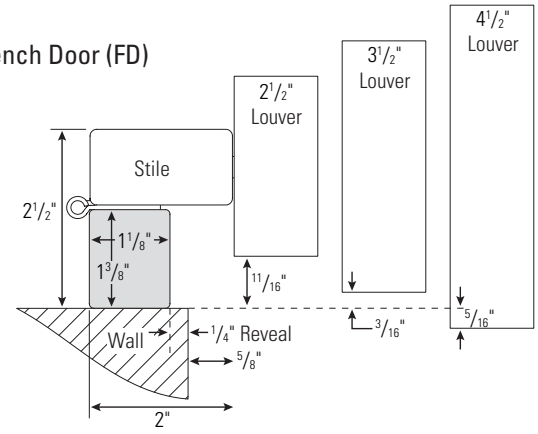


Outside Mount (OM)

Trim Hang Strip (THS)

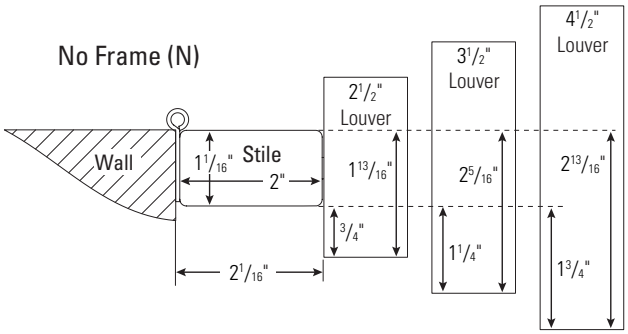


French Door (FD)



Outside Mount (OM)

No Frame (N)



Inside Mount (IM)

Notes

- For Front Tilt and Concealed Tilt, with all frame types, allow an additional 1/4" for louver clearance from the back edge of the louvers.
- Always check for obstructions.

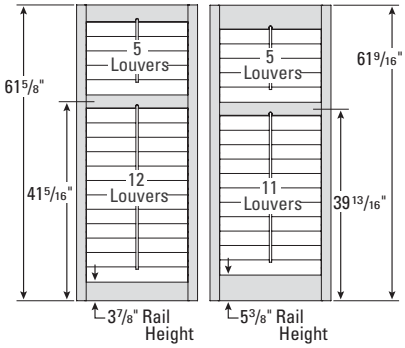
Measuring Guidelines

Importance of Accuracy

Proper fit requires precise, accurate measurements. It is essential to use a quality steel tape measure. Measure all windows, even though they may appear to be identical. Measurements should indicate the width first, then the height. Always measure to the nearest 1/16".

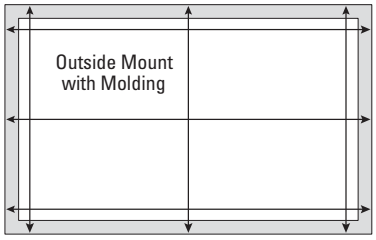
Notes

- Cranks, latches, depth, and squareness of the window opening must also be considered.
- Ordering openings with minor height variations may result in significant differences in louver count, divider rail placement, and rail size as shown in the example below. To avoid this issue, order all openings of similar height with the exact same height, divider rail location, or split tilt, etc.



Outside Mount Frames on Molding

1. Measure the width and height from outside of molding to outside of molding in three places, as indicated below. Order the **largest** size.



Ordered measurements will be the finished size of the shutter including the frame.

Outside Mount L Frames Around Molding

Notes

Take into consideration the construction of the window to ensure sufficient mounting space and a secure attachment to the wall stud or window framing.

1. Measure the width and height in three places, as described above.
2. To determine ordered size, add the appropriate overlap factors from the Outside Mount Frame Overlap chart.

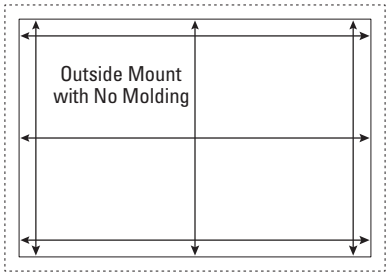
Ordered measurements will be the finished size of the shutter including the frame.

Notes

- If the molding is wider than 1 5/8", it will be visible when louvers are opened. Check louver clearance to determine if build-out is required.

Outside Mount with L Frames or Casing Frame (No Molding)

1. Measure the width and height inside the opening in three places, as indicated below. Record all measurements.



2. To determine ordered size, add the appropriate overlap factors from the Outside Mount Frame Overlap chart.

Ordered measurements will be the finished size of the shutter including the frame.

Outside Mount Frame Overlap

Frame Type	Overlap per Frame Side
All L Frames	1 3/8"
Casing Frame	2 3/4"

Notes

- Overlap factor provides for frame base plus 1/4" reveal per frame side. Add additional reveal when required.

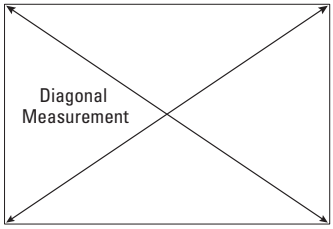
Inside Mount with L Frames or Z Frames

Z frames require these flat surfaces around the opening for the frame overlap (per frame side):

- Standard Z-Frame (Z62K): 1"
- Traditional Z-Frame (Z63K): 1 3/8"
- Contemporary Z-Frame (Z66K): 1 1/4"
- Contemporary Tilt-in Z-Frame (Z67K): 7/8"
- Traditional Tilt-in Z-Frame (Z68K): 7/8"

L frames fit inside the opening and require no overlap.

1. Measure the width inside the opening at the top, middle, and bottom. Order the **smallest** size.
2. Measure the height inside the opening at the left, center, and right. Order the **smallest** size.
3. To determine squareness, measure diagonally from top left to bottom right from top right to bottom left. If the measurements are not equal, the opening is not square. If the measured difference is greater than 1/2", reduce the ordered size accordingly or consider an outside mount.



Minimum Mounting Depths

For minimum mounting depths refer to Standard Hinged Panels℠.

Inside Mount Deductions

Your ordered measurements are the size from which deductions will be taken at the factory. Follow the same measuring procedures (steps 1, 2, and 3) as shown for inside mounts with L-frames or Z-frames.

Inside Mount Framed Deductions

Frame Type	Width	Height
4-Sided Frames	–1/4"	–1/4"
3-Sided Frames with no Bottom	–1/4"	–1/8"

Notes
- All deductions are taken from ordered dimensions and may vary ±1/16".

Inside Mount No Frame Deductions

Frame Type	Width	Height
Panel Deductions	–3/16"	–1/4"

Notes
- All deductions are taken from ordered dimensions and may vary ±1/16".
- Hinge thickness consumes half of width deduction.

Inside Mount Hang Strip Behind (HSB) and Hang Strip to the Side (HSS) Deductions

Frame Type	Width	Height
Panel Deductions	–3/16"	–1/4"
Frame Deductions — 1- or 2-Sided	0"	–1/16"
Frame Deductions — 3-Sided	–1/4"	–1/8"
Frame Deductions — 4-Sided	–1/4"	–1/4"

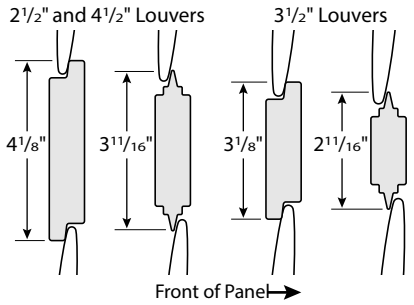
Notes
- All deductions are taken from ordered dimensions and may vary ±1/16".
- With 3-sided door applications (3D), the factory will provide 5/8" panel-to-floor deduction.
- Light Stop is recommended to minimize the light gaps around panels. It must be ordered in the Frame Detail.

Measuring for Divider Rails and Split Tilt

Divider Rails

Divider rails add strength to shutter panels while providing versatility. With a divider rail in place, the separate sections of the shutter panel operate independently of each other.

Divider rail heights are shown below for the different louver sizes. Note that the divider rails for up/down closure are slightly smaller than the rails for upward only closure.



For Standard Hinged panels, one divider rail is required for panels greater than 72" in height. Two divider rails are required for panels greater than 102" in height.

For Track Configurations, French door cut-outs, and their companions, one divider is required for panels greater than 84" in height.

Notes
- Divider rail location may vary up or down as much as 1" with 2½" louvers, 1½" with 3½" louvers, and 2" with 4½" louvers.
- In the closed position, the ordered split tilt height will be covered by the lower louver section.
- The top of the louver in the lower louver section, in the closed position, may be above the ordered split tilt location by as much as 2" with 2½" louvers, 3" with 3½" louvers, and 4" with 4½" louvers. If location is critical, contact Customer Service.

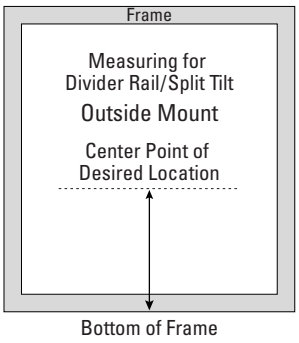
Divider Rail/Split Tilt Location

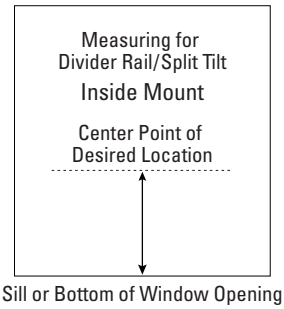
The divider rail/split tilt should be placed to meet customer needs. You must indicate placement of the divider rail/split tilt.

Note

With multiple windows in the same room, order the same heights whenever possible to avoid visual misalignment.

- **Outside mount**: measure from the bottom of where the frame will be located to the center point of the desired location.
- **Inside mount**: measure from the bottom inside of the opening to the center point of the desired location.
- **Three-sided frame**: measure from the floor or sill to the center point of the desired location.





These are the requirements when specifying divider rail or split tilt locations:

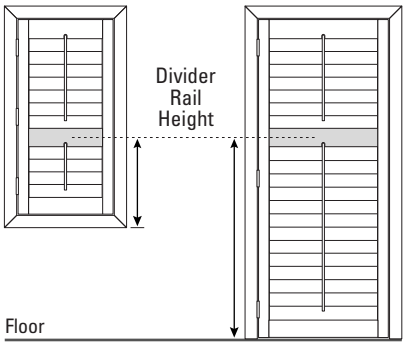
- Maximum distance from center of the divider rail to the center of other divider rails, or to the top and bottom of a shutter panel:
  - — Standard Hinged Panels: 72"
  - — Track configurations, French door cutouts, and their companions: 84"

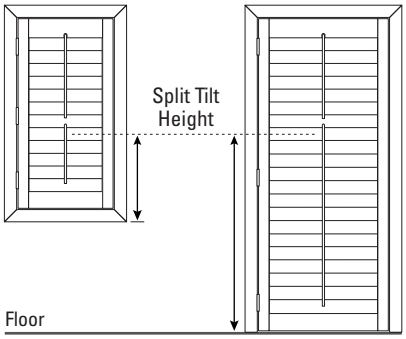
Minimum Louver Chart Divider Rail

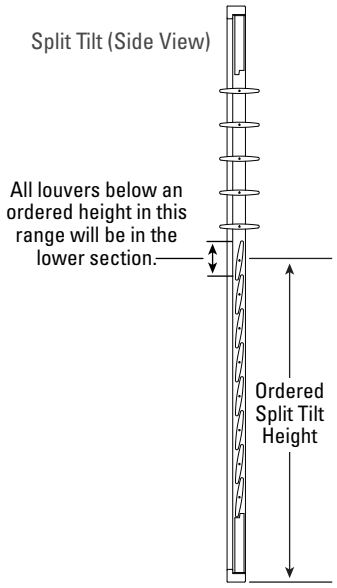
Operating System	2½"	3½"	4½"
Front Tilt	2	2	2
Concealed Tilt	2	2	2

Specifying Divider Rail/Split Tilt Locations on Windows of Different Heights

1. Determine the desired divider rail/split tilt location for all windows.
2. Mark the location on the molding or wall at the first window.
3. Measure from the floor to your mark.
4. Carry that measurement from the floor to all the other windows and mark the molding or wall at each location.
5. Then measure up to the mark on all windows, following the procedure for outside mounts, inside mounts, or three-sided frames.







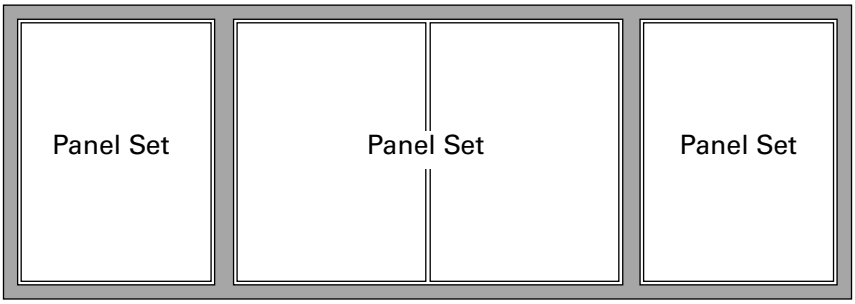
Openings with T-Posts

- A T-Post is a vertical component of the shutter frame that separates the frame into multiple panel sets. Shutter panels are hinged within each set.
- T-Posts allow for placement of more panels (or panel sets) within the same opening, and add structural integrity to a shutter.
- T-Posts can be ordered as EQP or measured.

EQP T-Posts

- All panels in the opening are equal in width.
- T-Post positions are predetermined based on the shutter configuration.
- T-Post and panel width measurements are not required.

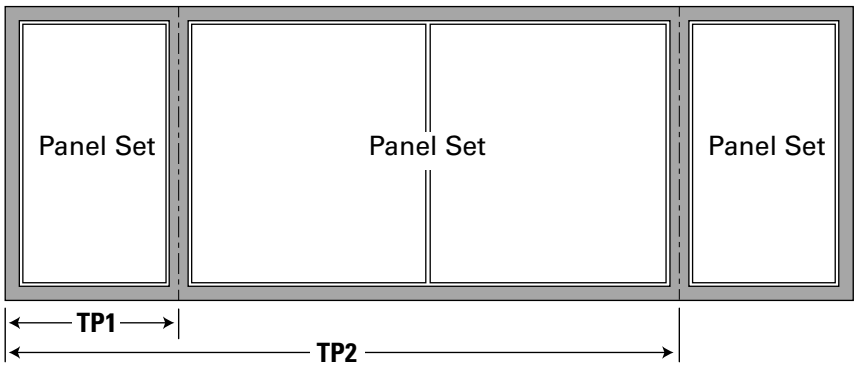
EQP T-Posts



Measured T-Posts With Even Panels

- Panel widths are equal within each panel set.
- T-Post positions are measured.
- T-Post measurements (TP1, TP2, etc.) are required.
- Panel width measurements are not required.

Measured T-Posts With Even Panels



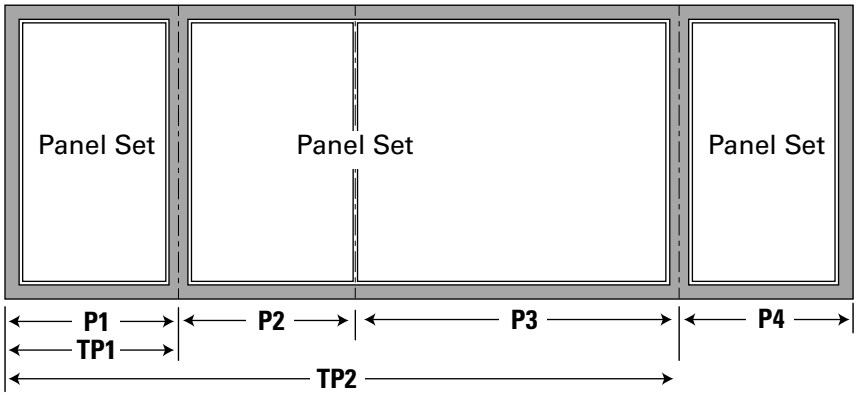
Measured T-Posts With Uneven Panels

- Panel widths are not equal within each panel set.
- T-Post positions are measured.
- T-Post measurements (TP1, TP2, etc.) are required.
- Panel width measurements (P1, P2, etc.) are required.

Example shown on the right:

— P1 must be equal to TP1
— P1 + P2 + P3 must be equal to TP2
— P1 + P2 + P3 + P4 must be equal to the ordered width

Measured T-Posts With Uneven Panels



Measuring for T-Posts

1. Measure from the left-most point of the overall ordered width (for outside mount, include frame adder) to the center of the first desired T-Post location.
2. Measure from the left-most point of the overall ordered width to the center of the second desired T-Post location.
3. Repeat this procedure for any additional T-Post locations.
4. Enter the desired T-Post locations in designated section of the order form.

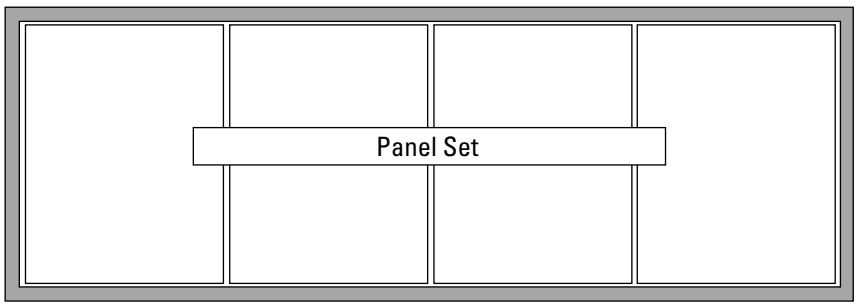
Openings without T-Posts

- All panels within the opening make up one panel set.
- Shutters without T-Posts can be ordered with Even panels or Uneven panels. Even panels is the default.
  - To order a shutter with all panels having equal widths, select Even panels.
  - When specific panel widths are needed, use special instructions to enter the desired locations where the panels should meet.

Even Panels

- All panels in the opening are equal in width.
- Panel width measurements are not required.

Even Panels



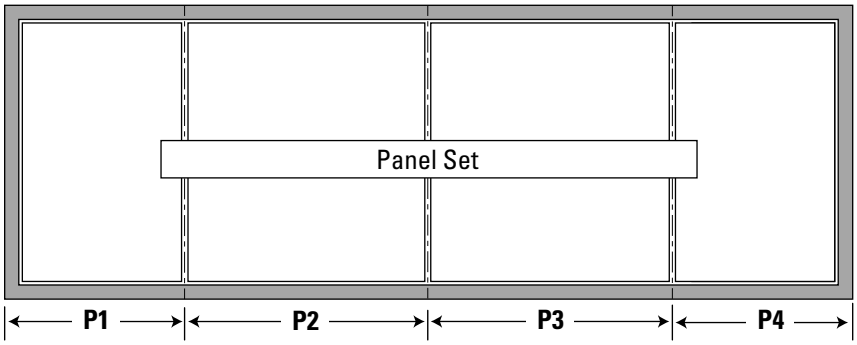
Uneven Panels

- Panel widths are not equal.
- Panel width measurements are required.

Example shown on the right:

- P1 + P2 + P3 + P4 must be equal to the ordered width

Uneven Panels



Configurations

Overview

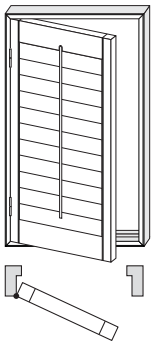
In this panel configuration section, some of the most popular shutter configurations are shown. Each configuration has a letter code, as well as minimum and maximum ordered widths. Order your shutter configuration by the example codes shown.
Ordering panels in even numbers is often suggested because it allows for uniform folding when the panels are opened to the side of the window.
The use of a T-Post increases the number of possible panel combinations.

Notes

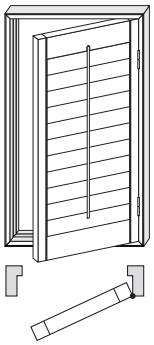
- The minimum and maximum ordered widths include frames and T-Posts as illustrated.
- For minimum and maximum panel dimensions, see Size Standards[99].
- Bi-Fold or Bypass track configurations are recommended for large 3-sided door openings.
- Vertical T-Posts are recommended on standard hinged, bi-fold panels where the width is greater than the height. Example: LLRR should be ordered as LRTLR.

One Panel

L



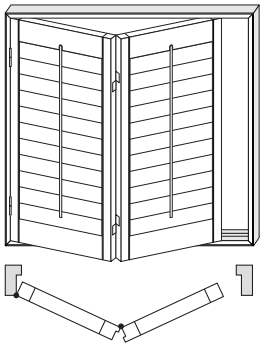
R



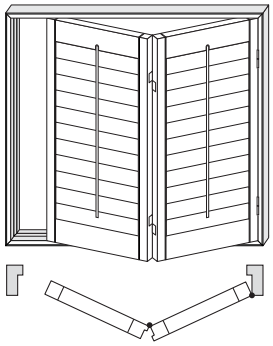
		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	$7\frac{3}{16}$"	$36\frac{1}{8}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	$8\frac{15}{16}$"	$37\frac{7}{8}$"
	HSS	$9\frac{15}{16}$"	$38\frac{7}{8}$"
OM	N, HSB	7"	36"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	$8\frac{11}{16}$"	$37\frac{5}{8}$"
	HSS	$9\frac{15}{16}$"	$38\frac{7}{8}$"
	C61	$11\frac{7}{16}$"	$40\frac{3}{8}$"

Two Panels — Bi-Fold

LL



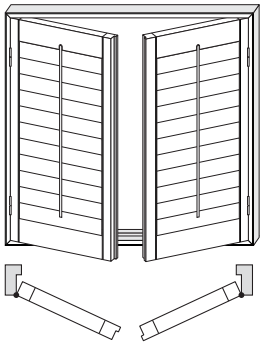
RR



		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	14"	$47^{15}/_{16}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	$15^{3}/_{4}$"	$49^{11}/_{16}$"
	HSS	$16^{3}/_{4}$"	$50^{11}/_{16}$"
OM	N, HSB	$13^{7}/_{8}$"	$47^{13}/_{16}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	$15^{1}/_{2}$"	$49^{7}/_{16}$"
	HSS	$16^{3}/_{4}$"	$50^{11}/_{16}$"
	C61	$18^{1}/_{4}$"	$52^{3}/_{16}$"

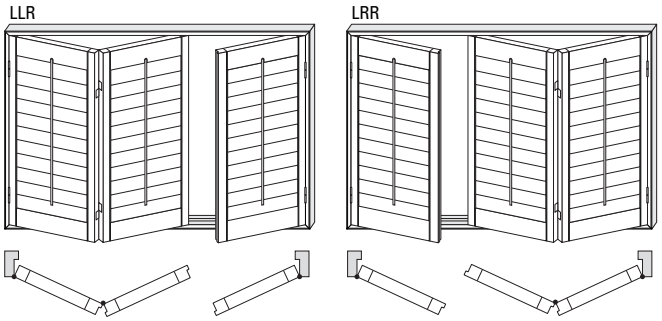
Two Panels — Individually Hinged

LR



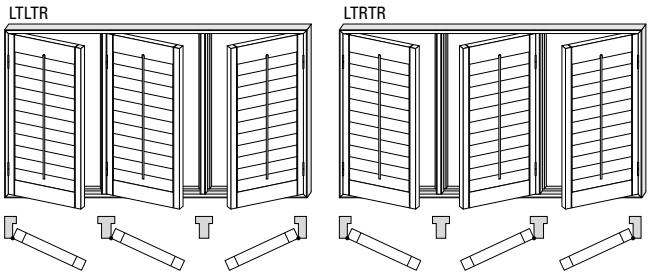
		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	14"	$71^{15}/_{16}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	$15^{3}/_{4}$"	$73^{11}/_{16}$"
	HSS	$16^{3}/_{4}$"	$74^{11}/_{16}$"
OM	N, HSB	$13^{13}/_{16}$"	$71^{13}/_{16}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	$15^{1}/_{2}$"	$73^{7}/_{16}$"
	HSS	$16^{3}/_{4}$"	$74^{11}/_{16}$"
	C61	$18^{1}/_{4}$"	$76^{3}/_{16}$"

Three Panels — Bi-Fold

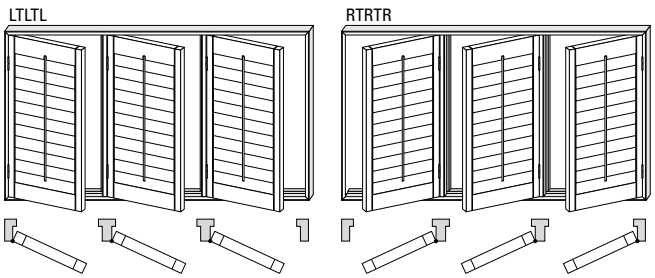


		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	$20^{13}/_{16}$"	$71^{3}/_{4}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	$22^{9}/_{16}$"	$73^{1}/_{2}$"
	HSS	$23^{9}/_{16}$"	$74^{1}/_{2}$"
OM	N, HSB	$20^{11}/_{16}$"	$71^{5}/_{8}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	$22^{5}/_{16}$"	$73^{1}/_{4}$"
	HSS	$23^{9}/_{16}$"	$74^{1}/_{2}$"
	C61	$25^{1}/_{16}$"	76"

Three Panels — Individually Hinged



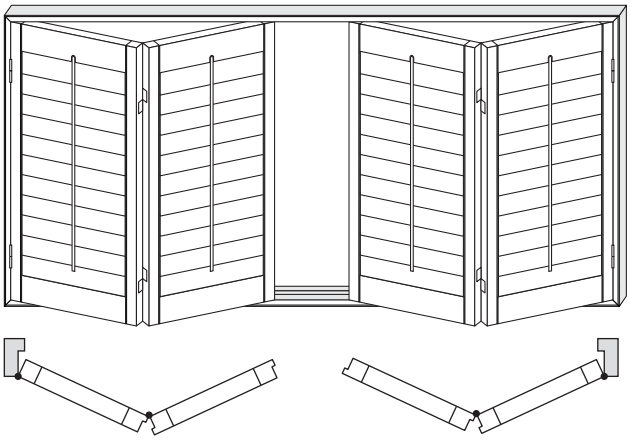
		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	24"	$110^{15}/_{16}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	$25^{3}/_{4}$"	$112^{11}/_{16}$"
	HSS	$26^{3}/_{4}$"	$113^{11}/_{16}$"
OM	N, HSB	$23^{13}/_{16}$"	$110^{13}/_{16}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	$25^{1}/_{2}$"	$112^{7}/_{16}$"
	HSS	$26^{3}/_{4}$"	$113^{11}/_{16}$"
	C61	$28^{1}/_{4}$"	$115^{3}/_{16}$"



		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	24"	$110^{15}/_{16}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	$25^{3}/_{4}$"	$112^{11}/_{16}$"
	HSS	$26^{3}/_{4}$"	$113^{11}/_{16}$"
OM	N, HSB	$23^{13}/_{16}$"	$110^{13}/_{16}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	$25^{1}/_{2}$"	$112^{7}/_{16}$"
	HSS	$26^{3}/_{4}$"	$113^{11}/_{16}$"
	C61	$28^{1}/_{4}$"	$115^{3}/_{16}$"

Four Panels — Bi-Fold

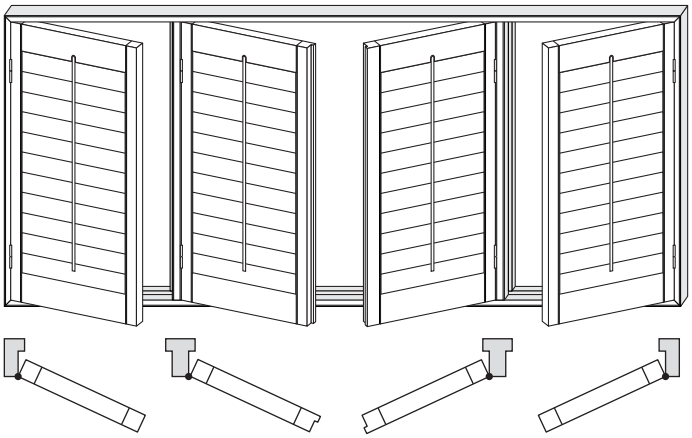
LLRR



		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	27 5/8"	95 5/8"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	29 3/8"	97 3/8"
	HSS	30 3/8"	98 3/8"
OM	N, HSB	27 1/2"	95 7/16"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	29 1/8"	97 1/8"
	HSS	30 3/8"	98 3/8"
	C61	31 7/8"	99 7/8"

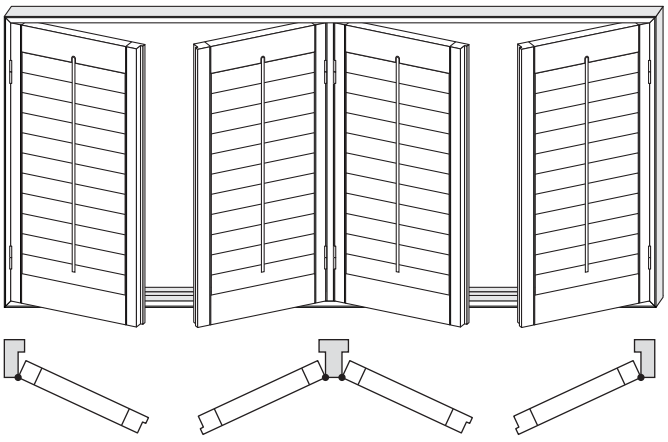
Four Panels — Individually Hinged

LTLRTR



		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	30 13/16"	146 3/4"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	32 9/16"	148 1/2"
	HSS	33 9/16"	149 1/2"
OM	N, HSB	30 5/8"	146 5/8"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	32 5/16"	148 1/4"
	HSS	33 9/16"	149 1/2"
	C61	35 1/16"	151"

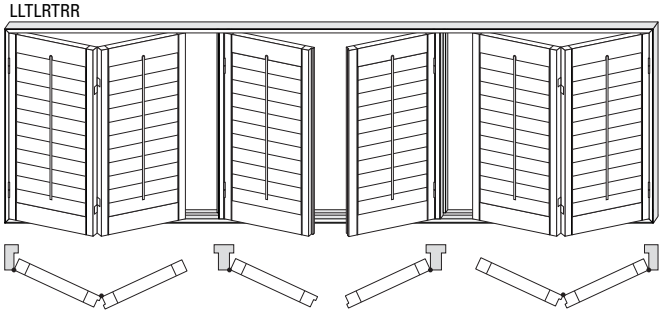
LRTLR



		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	29 3/16"	145 3/16"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	30 15/16"	146 15/16"
	HSS	31 15/16"	147 15/16"
OM	N, HSB	29 1/16"	145"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	30 11/16"	146 11/16"
	HSS	31 15/16"	147 15/16"
	C61	33 7/16"	149 7/16"

Six Panels — Bi-Fold

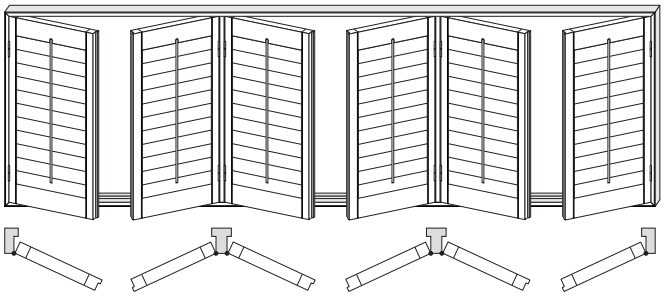
LLTLRTRR



		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	$44\frac{7}{16}$"	$146\frac{7}{16}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	$46\frac{3}{16}$"	$148\frac{3}{16}$"
	HSS	$47\frac{3}{16}$"	$149\frac{3}{16}$"
OM	N, HSB	$44\frac{5}{8}$"	$146\frac{1}{4}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	$45\frac{15}{16}$"	$147\frac{15}{16}$"
	HSS	$47\frac{3}{16}$"	$149\frac{3}{16}$"
	C61	$48\frac{11}{16}$"	$150\frac{11}{16}$"

Six Panels — Individually Hinged

LRTLRTLR



		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	$44\frac{7}{16}$"	$218\frac{3}{8}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	$46\frac{3}{16}$"	$220\frac{1}{8}$"
	HSS	$47\frac{3}{16}$"	$221\frac{1}{8}$"
OM	N, HSB	$44\frac{1}{4}$"	$218\frac{1}{4}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	$45\frac{15}{16}$"	$219\frac{7}{8}$"
	HSS	$47\frac{3}{16}$"	$221\frac{1}{8}$"
	C61	$48\frac{11}{16}$"	$222\frac{5}{8}$"

Notes
- Other multiple panel arrangements are possible, including eight and ten panels. Consult Customer Service for details.

The Basics

Shutters for French doors are always ordered as outside mounts (OM). They are single panel shutters hinged on the same side as the actual French door. Depending on the type of handle and door, there are several different frame options that can be specified, including doors with and without cut-outs. Shutters with cut-outs provide clearance for lever handles. Whichever frame option you choose, always check for sufficient clearance and possible obstructions.

Materials and Finish

French door cut-outs and their companions are made with wood materials finished to coordinate with Composite Shutters colors. See Specialty Shapes℠ for more details.

Frame Options

L Frames

There are four L-Frame projections available for French door applications:

- $2^{3}/_{8}$" Traditional L-Frame
- $2^{7}/_{8}$" Traditional L-Frame
- $2^{3}/_{8}$" Contemporary L-Frame
- $2^{7}/_{8}$"" Contemporary L-Frame

Full and partial trim extensions are available for projecting door trim.

Frame Type	Options
$2^{3}/_{8}$" L-Frame	SH, FDC, Trim Extension
$2^{7}/_{8}$" L-Frame	SH, FDC, Trim Extension
4-Sided Hang Strip	FD

Hang Strips

Hang strips may be used when the French door has a small handle. The hang strips are fabricated into a four-sided mitered frame that is concealed by the closed shutter panel. Only the shutter panel is visible from the front view.

Build-Out

There are three build-out options for French doors. Light Stop is available as LS-$^{1}/_{2}$" (LS12) and LS-$^{5}/_{8}$" (LS58) as $^{3}/_{8}$" build-out, and trim hang strip (THS) is available as $^{11}/_{16}$" build-out.

Frames with Full Louver Clearance

For details, see Standard Hinged Panels℠.

Louver Size	$2^{1}/_{2}$"	$3^{1}/_{2}$"	$4^{1}/_{2}$"
$2^{3}/_{8}$" Traditional & Contemporary L-Frames	F or C	F	—
$2^{7}/_{8}$" Traditional & Contemporary L-Frames	F or C	F or C	F or C
Hang Strip (FD)	F or C	F	—

Notes

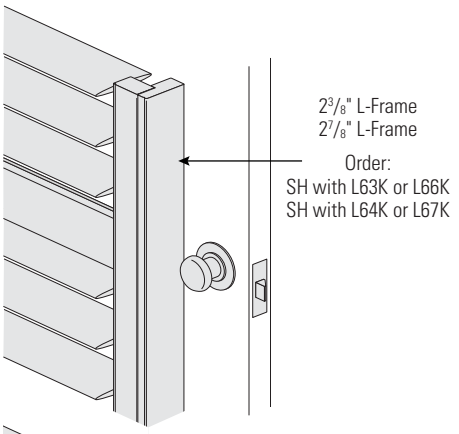
- F = front tilt; C = Concealed Tilt.

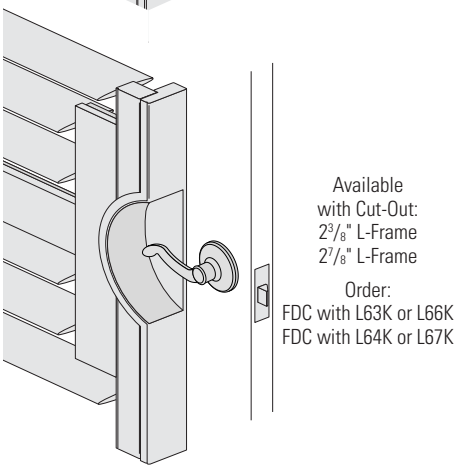
Measuring and Ordering

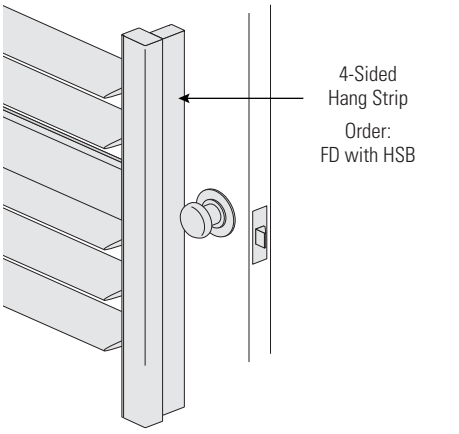
Measuring instructions for frame options are shown in this section. Use the measuring guidelines with the Composite Shutters worksheets.

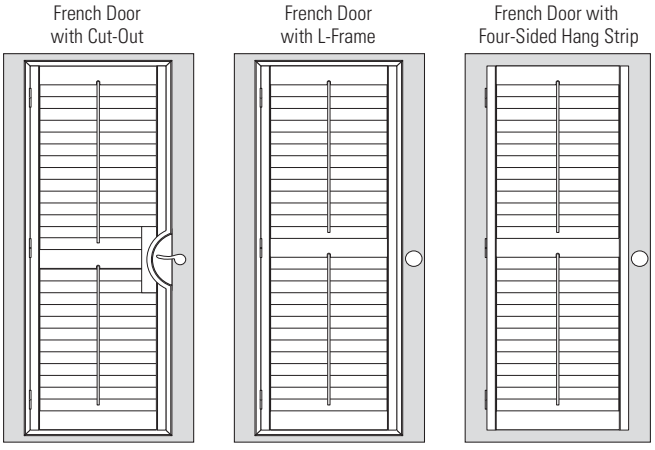
When ordering, use the following codes for frame type:

- L63: $2^{3}/_{8}$" Traditional L-Frame
- L64: $2^{7}/_{8}$" Traditional L-Frame
- L65: $2^{3}/_{8}$" Contemporary L-Frame
- L66: $2^{7}/_{8}$"" Contemporary L-Frame
- Trim Extensions (add trim extension code to frame code; example: L63KP):
  - KP: Partial Extension
  - KF: Full Extension
- HSB: Hang Strip Behind









Cut-Outs

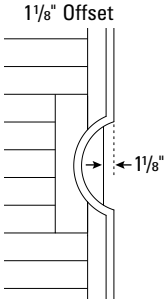
Two cut out shapes are available with French doors, curved, and rectangular. Both shapes are designed to fit around door handles and deadbolts. A 3/8" back plate covers the cut-out area and sits against the door. The back plate extends into the louver area of the shutter panel. Cut-outs are available with and without an offset, and with full or partial trim extensions.
French door cut-out shutters will be built to ordered width and height.

Surcharges

Add the appropriate French door cut-out surcharge to the base price of the framed shutter.

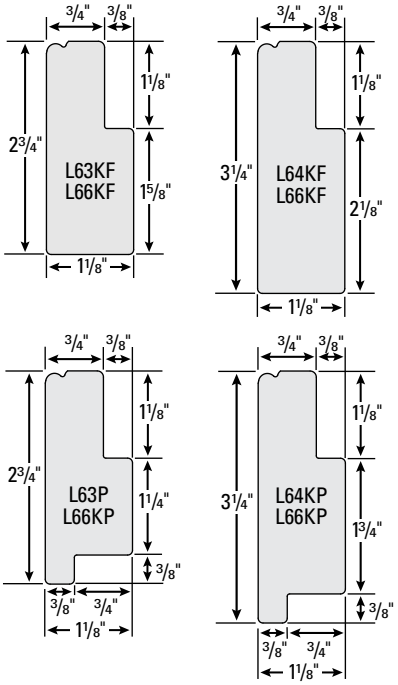
Offset Cut-Outs

With offset cut-outs, the flange area is offset the width of the frame base (1 1/8"). This is a good option where there is limited space between the door handle/hardware and the glass. When ordering, specify an offset on the French Door Cut-Out worksheet.



Trim Extensions

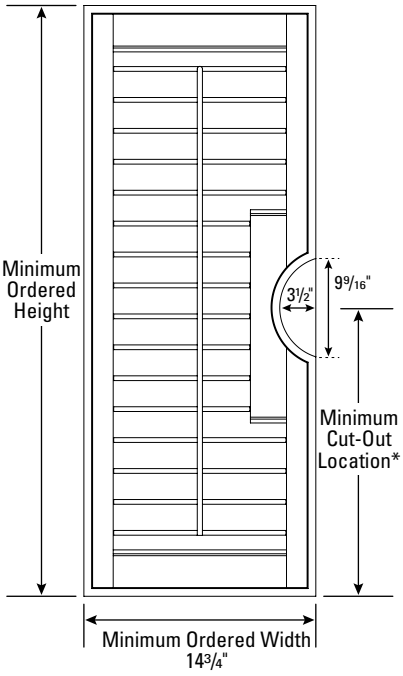
The frame can be extended to fit on the projecting trim that surrounds some glass openings. There are two types of trim extensions, full and partial. Trim extensions can be ordered per side — top, left, right, and bottom. If ordering a trim extension and offset cut-out, a gap may be visible behind the backplate.



Curved Cut-Out Sizes

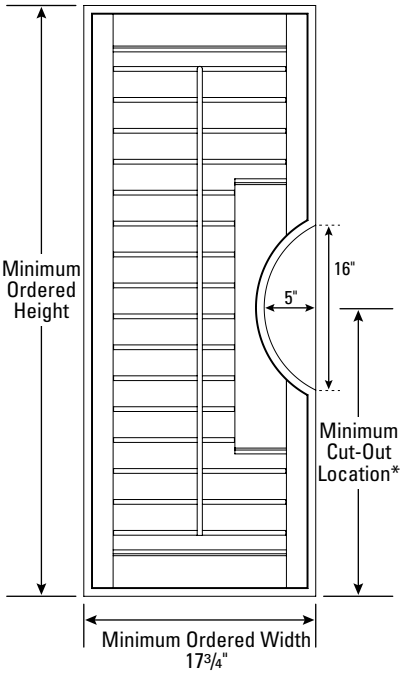
Two size cut-out options are available: 3 1/2" and 5". The 3 1/2" cut-out accommodates most door levers. The 5" cut-out is for longer lever handles and deadbolt locks. Both sizes can be ordered with or without an offset. See the illustrations below.

3 1/2" Curved French Door Cut-Out



Measured from bottom of frame to center of cut-out

5" Curved French Door Cut-Out



Measured from bottom of frame to center of cut-out

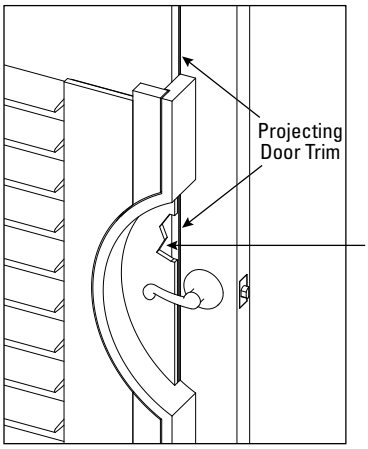
Louver Size	Minimum Ordered Height	Minimum Cut-Out Location
2 1/2"	31 5/16"	15 1/8"
3 1/2"	33 5/16"	16 1/8"
4 1/2"	37 5/16"	17 1/8"

Louver Size	Minimum Ordered Height	Minimum Cut-Out Location
2 1/2"	37 5/16"	18 5/16"
3 1/2"	39 5/16"	19 5/16"
4 1/2"	41 5/16"	20 5/16"

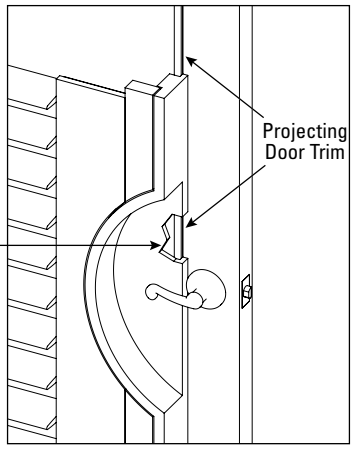
Notes

- Minimum ordered height leaves one louver between the cut-out block and rails.
- Some ordered height and cut-out height combinations may not be possible due to rail height variations.

Full Trim Extension with Offset Cut-Out



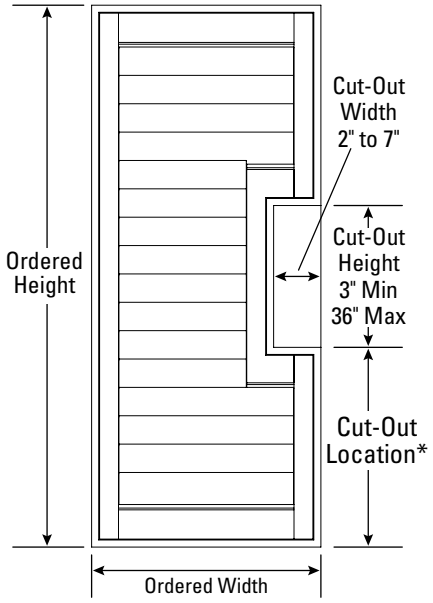
Partial Trim Extension



Rectangular Cut-Outs

The rectangular cut-out can be ordered at a custom size, with or without an offset.

Rectangular French Door Cut-Out



**Measured from bottom of frame to bottom of cut-out*

Notes

- The ordered height requires space for one louver between the cut-out block and rails.
- Some ordered height and cut-out height combinations may not be possible due to rail height variations.

Minimum Ordered Width

Because rectangular cut-outs are custom sized, minimum widths, and heights vary. With a 2" cut-out width, minimum ordered width is $11^{11}/_{16}$" with front tilt and $10^{11}/_{16}$" with Concealed Tilt. If your cut-out width is larger than 2", add the amount of cut-out width greater than 2" to these minimums.

Minimum Ordered Height

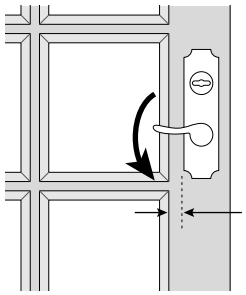
Minimum heights based on a cut-out height of 3" range from $23^{5}/_{16}$" to $29^{5}/_{16}$", depending on louver size. With the 3" cut-out height, minimum cut-out locations range from $10^{3}/_{16}$" to $13^{3}/_{16}$".
If the shutter approaches these width or height minimums, contact customer service for more specific information.

Measuring for Curved and Rectangular Cut-Outs

Use the French Door Cut-Out worksheet and template to perform the required calculations. Transfer the indicated results to the Composite Shutters Specialty order form and attach the worksheet to the order form.

Mounting Surface

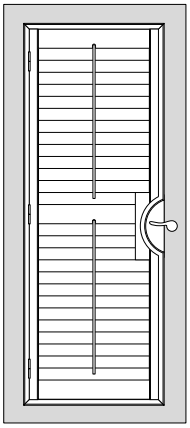
Align the French door cut-out template to the base of the door handle or plate and position the template in the desired location. Confirm proper handle rotation. The handle lever must rotate within the cut- out area. We recommend having a minimum $^{1}/_{2}$" flat mounting surface for attaching the shutter frame, as shown below. If there is less than $^{1}/_{2}$" flat mounting surface, an offset cut-out is recommended.



Ideally, there should be at least $1^{3}/_{8}$" of flat mounting surface so that the entire base of the frame is on the flat mounting surface and there is room for a $^{1}/_{4}$" reveal. This way, the frame base is not visible from the other side of the French door.

Hinge Side vs. Cut-Out Side

Order an "L" (left-hinged) panel for a right cut-out (shown) or an "R" (right-hinged) panel for a left cut-out.



Notes

- Occasionally, adjacent French doors will only need a cut-out on one of the doors. To ensure that the panels for both of these doors are the same height and have coordinating divider rail locations, louver quantity, and rail sizes, be sure to indicate FDCWC (French door companion without cut-out) on your order.
- French door cut-outs are available on arch top and angle top panels.

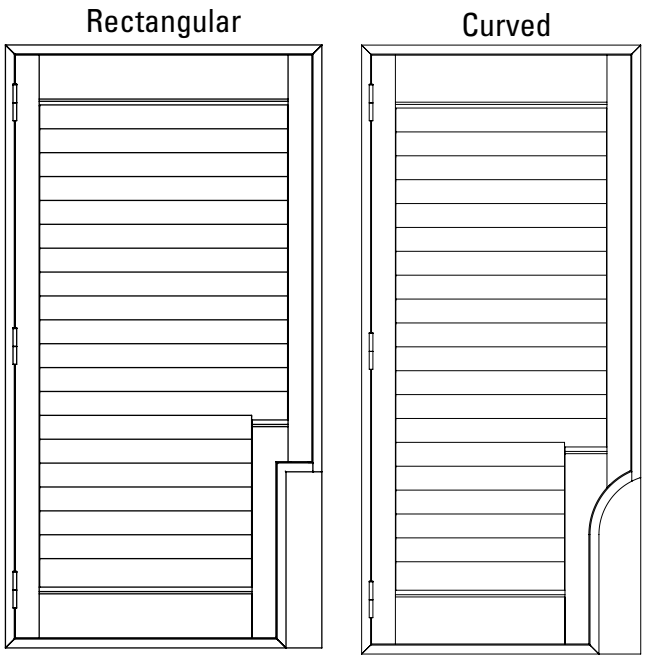
Corner Cut-Outs

On French doors where the glass does not run the full length of the door, corner cut-outs are available. All three cut-out sizes are available as corner cut-outs. For rectangular corner cut-outs, the width and height are customizable. For the 3 1/2" and 5" curved corner cut-outs, select the size needed in order to allow full operation of the door handle. Use the French Door Cut-Out Template to determine which size is needed.

For some door configurations, the backplate on the corner cut-out is not needed. The option for No Backplate can be selected at order entry. Please note that the window glass may be visible on corner cut-outs ordered without a backplate.

When a backplate is ordered, the 1 1/8" offset is available if needed.

See the French Door Cut-Out worksheet for ordering details.

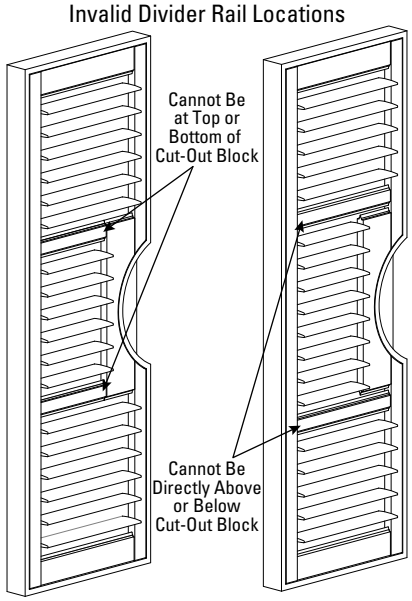


Divider Rail

A divider rail is required if the panel height is 84" or greater. Up to two are permitted.

The divider rail location may vary up or down as much as 1" with 2 1/2" louvers, 1 1/2" with 3 1/2" louvers, and 2" with 4 1/2" louvers. The divider rail cannot be specified at the top or bottom of the cut-out or directly above or below the cut-out. Contact Customer Service for more specific information.

Invalid Divider Rail Locations

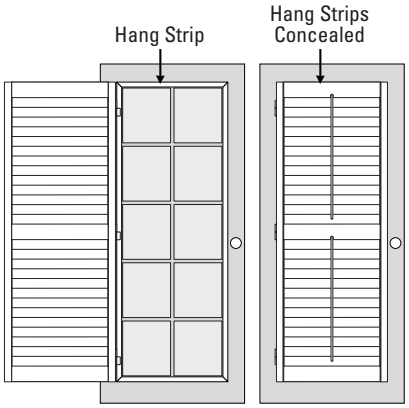


Four-Sided Hang Strip or L-Frame

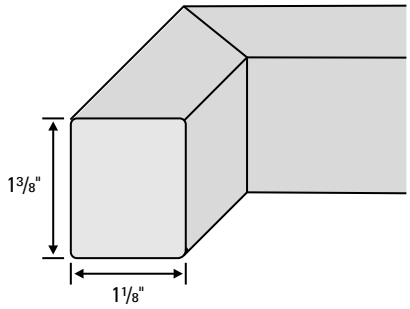
Hang Strips

Hang strips are an excellent option for French door shutters for several reasons:

The shutter panel fits over the face of the frame, concealing it from view. This provides a clean, simple look on the French door.



- The amount of view through the louvers is typically about 10% more than other installation options.
- The narrow 1 1/8" width of the hang strips is perfect for the tight mounting clearances typical of French doors.
- Refer to Standard Hinged Panels.



Notes

- For use on French doors, the hang strips are turned so that the 1 3/8" dimension is the depth.

L Frames

For consumers who prefer a framed look on their French doors, there are four options:

- 2 3/8" Traditional L-Frame (L63K)
- 2 7/8" Traditional L-Frame (L64K)
- 2 3/8" Contemporary L-Frame (L66K)
- 2 7/8" Contemporary L-Frame (L67K)

Knob or Handle Clearance

In order for a hang strip or L-Frame to be specified, there must be sufficient mounting space between the knob or handle and the edge of the opening — a minimum of 1/2" plus room to operate the knob or handle, ideally 1 3/8".

If a lever-type handle is on the door, several options can be considered:

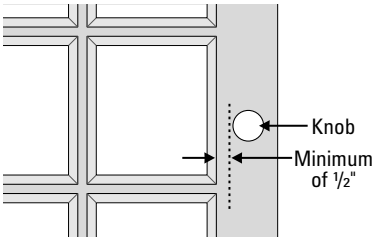
- Rotate the handle 90°.
- Replace the handle with a knob or egg-shaped handle.
- Consider a handle extension so that the handle clears the shutter.
- Order a French door cut-out, see French Doors.

Measuring for Hang Strips and L Frames

Refer to the French Door worksheet and follow the steps below. Enter all measurements on the worksheet and transfer the results to the specialty Composite Shutters order form and attach the worksheet.

Mounting Surface

Measure the width of available flat mounting surface between the edge of the opening and the door knob, handle, or base plate. Ideally, there should be sufficient flat mounting surface so that the entire base of the frame is on the flat mounting surface.



Divider Rail

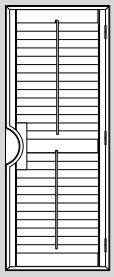
A divider rail is required if the panel height is 84" or greater. Up to two are permitted. The divider rail location may vary up or down as much as 1" with 2 1/2" louvers, 1 1/2" with 3 1/2" louvers, and 2" with 4 1/2" louvers.

Notes

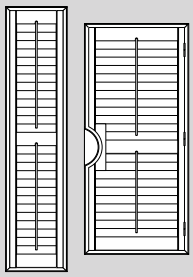
- Always check for sufficient clearance and any obstructions which may interfere with louver movement.

French Door Cut-Out (FDC) Options

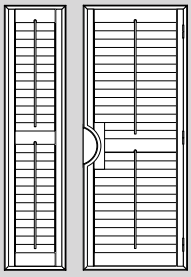
When a French Door Cut-Out is ordered with a side panel of the same height, it should be ordered as a companion.



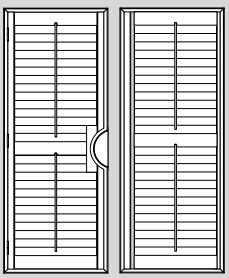
French Door Cut-Out (FDC): Wood



FDC with Sidelight Panel (Different Heights)
French Door Cut-Out: Wood
Sidelight Panel: Hybrid Material



FDC with Companion Sidelight Panel (Same Heights)
French Door Cut-Out: Wood
Companion Sidelight Panel: Hybrid Material



FDC with Companion Panel Without Cut-Out
French Door Cut-Out: Wood
Companion Panel without Cut-Out: Wood

Wood: Solid or engineered wood painted to coordinate with solid colors.
Hybrid Material: Linear hybrid material with matte finish.

The Basics

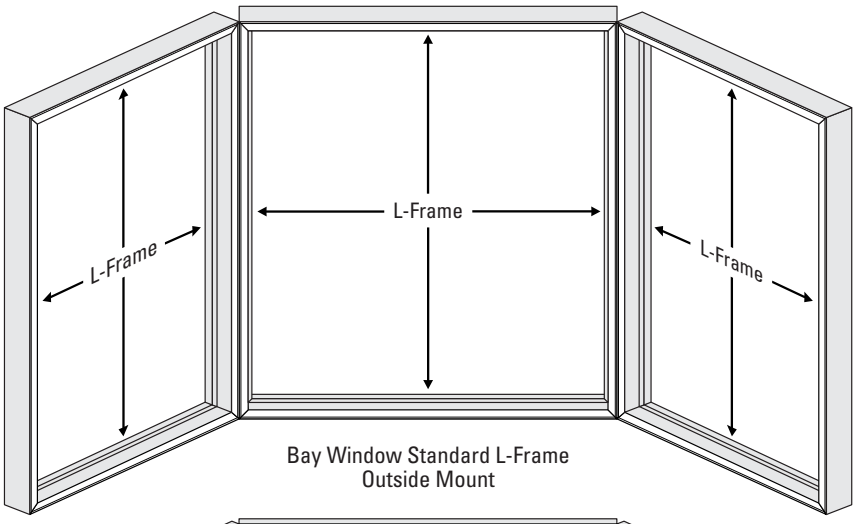
Shutters for bay windows consist of three or more separate framed shutter assemblies which butt together at their front corners. Each of the separate framed assemblies are priced and ordered as individual units.

Frame Options

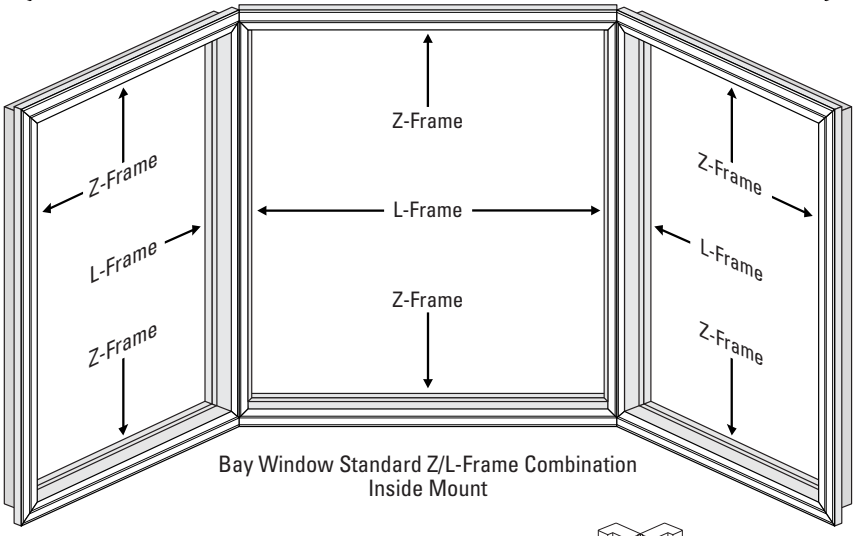
Seven types of frames are used for shutters in bay windows:

- 1 5/8" Traditional L-Frame (L61K)
- 1 3/4" Traditional L-Frame (L68K)
- 1 3/4" Contemporary L-Frame (L65K)
- Casing Frame (C61)
- Standard Z-Frame (Z62K)
- Traditional Z-Frame (Z63K)
- Contemporary Z-Frame (Z66K)

L frames and Casing Frames are used for outside mounts, and Z frames in combination with L frames are used for inside mounts.



Bay Window Standard L-Frame
Outside Mount



Bay Window Standard Z/L-Frame Combination
Inside Mount

Suggested Frame Combinations for Bay Windows

Frame Type	Vertical Frame
Standard Z-Frame	1 3/4" Contemporary L-Frame
Traditional Z-Frame	1 3/4" Contemporary L-Frame
Contemporary Z-Frame	1 3/4" Contemporary L-Frame
1 5/8" Traditional L-Frame	1 5/8" Traditional L-Frame
Casing Frame	1 5/8" Traditional L-Frame

Panel Configurations

Any standard hinged panel configuration — whether Bi-Fold or individually hinged — may be ordered for bay windows. However, it is very important to plan how the shutters will open after they are installed, taking into consideration how the panels interact with each other, as well as maintaining comparable panel widths.

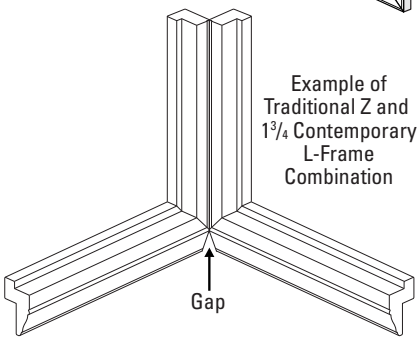
Measuring and Ordering

Measuring instructions are shown in Bay Windows℠. A special angle guide measuring tool enables you to measure and order without using templates.

For each order, complete the bay and corner worksheet, transfer the information to the standard Composite Shutters order form and attach a copy of the worksheet to the order form.

Sill Frames

If desired, a Sill Frame can be specified at the top and/or bottom of the opening.



Example of Traditional Z and 1 3/4 Contemporary L-Frame Combination

Notes

- Traditional Z/L, and Casing Frame with 1 5/8" Traditional L-Frame combinations are not recommended with bay window applications. This frame profile creates a gap at the corner where the frame assemblies meet. See the measuring worksheet for application details.

Measuring

Measuring for Bay Window Outside Mounts (OM)

1⅝" Traditional L-Frame (L61K)

Refer to the Bay Window worksheet and follow the steps below. Enter all measurements on the worksheet. Then perform the required calculations, transfer the results to the standard Composite Shutters order form and attach the worksheet.

Step One

Using the appropriate angle guide measuring tool, locate the 1⅝" Traditional L-Frame portion at the appropriate position left of opening 1 and allow for a ⅜" reveal. Mark **A**. Repeat this step for **F**.

Step Two

Using the angle guide measuring tool, determine and mark positions **B** and **C**. Repeat this step for **D** and **E**.

Step Three

Measure the distance from mark **A** to mark **B** (opening 1). Repeat for **C** to **D** (opening 2) and **E** to **F** (opening 3). Enter these width measurements on the worksheet.

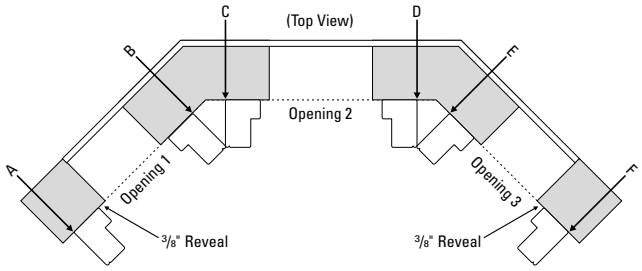
Step Four

Measure the inside height in three places for each opening. Use the **largest** height measurement **for all three shutters** and add the following:

- Add 3" for 4-sided 1⅝" Traditional L-Frame.
- Add 2⅝" for 4-sided frame with bottom sill not on existing window sill.
- Add 1½" for Sill Frame on window sill.

Step Five

Transfer the information from the worksheet to the standard Composite Shutters order form and indicate in the "Notes" section that the shutters are for a bay window. Attach the worksheet to the order form.



Measuring for Bay Window Inside Mounts (IM)

Standard Z-Frame (Z62K) with 1¾" Contemporary L-Frame (L65K)

Refer to the Bay Window worksheet and follow the steps below. Enter all measurements on the worksheet. Then perform the required calculations, transfer the results to the standard Composite Shutters order form and attach the worksheet.

Step One

Using the appropriate angle guide measuring tool, locate the Standard L-Frame portion at the left corner of the bay, and mark positions **B** and **C**. Repeat this step for **D** and **E**.

Step Two

Measure inside opening 1 from the wall at **A** to the mark at **B**. This provides a ¼" space at **A**.

Step Three

Measure inside opening 2 from the mark at **C** to the mark at **D**. Add ¼" to determine ordered width.

Step Four

Measure inside opening 3 from the mark at **E** to the wall at **F**. This provides a ¼" space at **F**.

Step Five

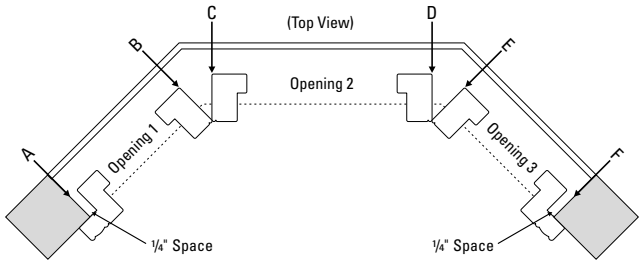
Measure the inside height in three places for each opening. Use the **smallest** inside height and subtract ¼" to determine your ordered height **for all three openings** to allow for vertical racking adjustment.

Step Six

Transfer the information from the Bay Window worksheet to the standard Composite Shutters order form and indicate in the "Notes" section that the shutters are for a bay window. Attach the worksheet to the order form.

Notes

- These measuring procedures provide a ⅜" reveal on the width.



The Basics

Shutters for corner windows consist of two separate framed shutter assemblies which butt together at their front corners. Each of the separate framed assemblies is priced and ordered as an individual unit. A hidden Hang Strip is used to connect the two assemblies where they meet, and should be ordered as lineal material.

Frame Options

Seven frame types are used for shutters in corner windows:

- 1 5/8" Traditional L-Frame (L61K)
- 1 3/4" Traditional L-Frame (L68K)
- 1 3/4" Contemporary L-Frame (L65K)
- Casing Frame (C61)
- Standard Z-Frame (Z62K)
- Traditional Z-Frame (Z63K)
- Contemporary Z-Frame (Z66K)

L frames and Casing Frame are used for outside mounts, and Z frames in combination with L frames are used for inside mounts.

Note that with the Z/L combination for inside mounts, the L-Frame is used as vertical components where the frame assemblies meet.

Suggested Frame Combinations for Corner Windows

Frame Type	Options
Standard Z-Frame	1 3/4" Contemporary L-Frame
Traditional Z-Frame	1 3/4" Contemporary L-Frame
Contemporary Z-Frame	1 3/4" Contemporary L-Frame
1 5/8" Traditional L-Frame	1 5/8" Traditional L-Frame
Casing Frame	1 5/8" Traditional L-Frame

Panel Configurations

Any standard hinged panel configuration — whether bi-fold or individually hinged — may be ordered for corner windows. However, it is very important to plan how the installed shutters will open.

For example, most customers would not want two "LR" configurations. Opening the shutter doors in the corner would conflict with each other. It would be better to order the shutters as single panels or bi-folds hinged to the outer side of the frame.

Measuring and Ordering

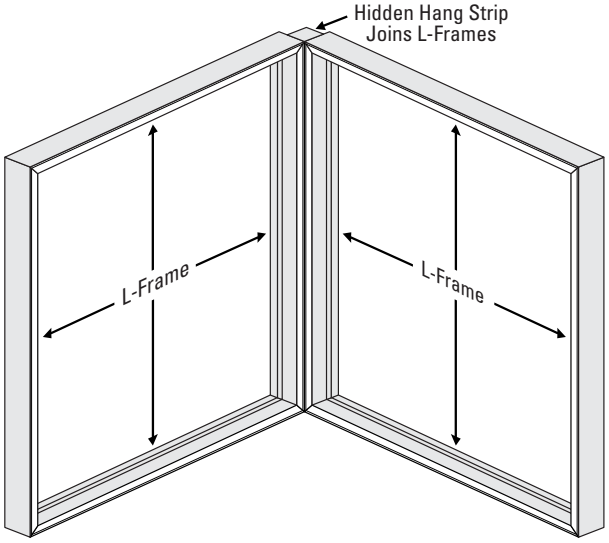
Measuring instructions are shown in Corner Windows℠.

For each order, complete the bay and corner worksheet, transfer the information to the standard Composite Shutters order form and attach a copy of the worksheet to the order form.

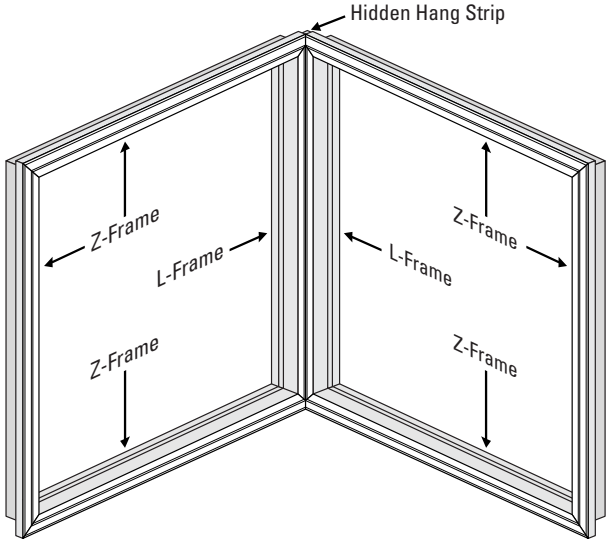
Sill Frames

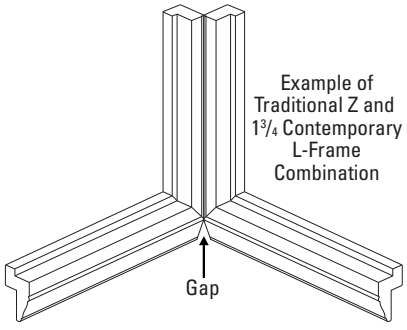
If desired, a sill frame can be specified at the top and/or bottom of the opening.

Corner Window L-Frame Outside Mount



Corner Window Z/L-Frame Combination Inside Mount





Notes

- Traditional Z/L and Casing Frame with 1 5/8" Traditional L-Frame combinations are not recommended with corner window applications.
  This frame profile creates a gap at the corner where the frame assemblies meet. See the measuring worksheet for application details.

Measuring

Measuring for Corner Window Outside Mounts (OM)

1 5/8" Traditional L-Frame (L61K)

Refer to the Corner Window worksheet and follow the steps below. Enter all measurements on the worksheet. Then perform the required calculations, transfer the results to the standard Composite Shutters order form and attach the worksheet.

Step One

Place the 1 5/8" Traditional L-Frame (L61K) at the appropriate position left of opening 1 and allow for a 3/8" reveal. Mark **A**. Repeat this step at **D**.

Step Two

Locate and mark positions **B** and **C** (same point).

Step Three

Measure the distance from mark **A** to mark **B** and subtract 1 5/8" (opening 1). Repeat the measurement for **C** to **D** and subtract 1 5/8" (opening 2). Enter these width measurements on the worksheet.

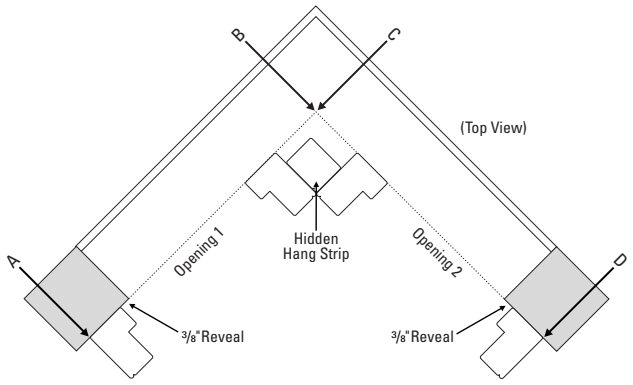
Step Four

Measure the inside height in three places for each opening. Use the **largest** height measurement **for both shutters** and add the following:

- Add 3" for 4-sided 1 5/8" Traditional L-Frame (L61K).
- Add 2 5/8" for 4-sided frame with bottom sill not on existing window sill.
- Add 1 1/2" for Sill Frame on window sill.

Step Five

Transfer the information from the worksheet to the standard Composite Shutters order form and indicate in the "Notes" section that the shutters are for a corner window. Attach the worksheet to the order form.



Measuring for Corner Window Inside Mount (IM)

Standard Z-Frame (Z62K) with 1 3/4" Contemporary L-Frame (L65K)

Refer to the Corner Window worksheet and follow the steps below. Enter all measurements on the worksheet. Then perform the required calculations, transfer the results to the standard Composite Shutters order form and attach the worksheet.

Step One

Locate and mark positions **B** and **C** (same point).

Step Two

Measure inside opening 1 from the wall at **A** to the mark at **B** and subtract 1/2". This provides a 1/4" space at **A**.

Step Three

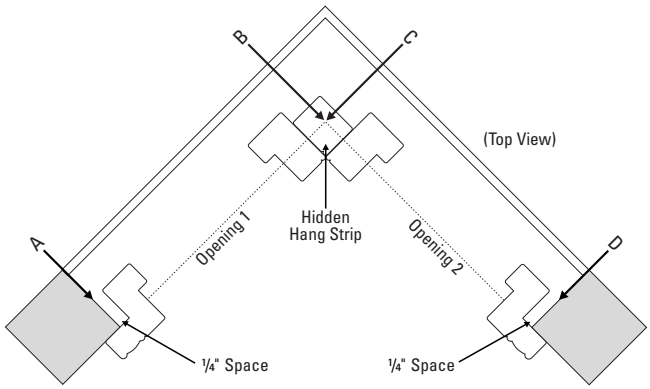
Measure inside opening 2 from the mark at **C** to the wall at **D** and subtract 1/2". This provides a 1/4" space at **D**.

Step Four

Measure the inside height in three places for each opening. Use the **smallest** inside height and subtract 1/4" to determine your ordered height **for both openings** to allow for vertical racking adjustment.

Step Five

Transfer the information from the worksheet to the standard Composite Shutters order form and indicate in the "Notes" section that the shutters are for a corner window. Attach the worksheet to the order form.



Notes

- These measuring procedures provide a 3/8" reveal on the width. After evaluating the diagonals, additional allowances may be necessary to compensate for out-of-square windows.
- For corner window applications, be sure to order Hang Strip as lineal material. Order the Hang Strip to be 1/16" shorter than the ordered height.

Café Shutters (CS)

Café shutters can be inside or outside mounted and must be identified as café panels when ordering. For a four-sided café, price the shutter using ordered width and café height, and add surcharge (see Pricing – Surcharges & Accessories∞). The surcharge is for the extra frame being used to cover the entire opening.

You may also order a three-sided frame, with the top of the frame sides flush with the top of the shutter panels. There is no surcharge for this type of application.

Café shutters can also be used for arch-top and angle-top openings. Again, with three-sided frames (straight portion only), there is no surcharge. With a full frame café shutter in an arch-top or angle-top opening, add the applicable surcharge (see Pricing – Surcharges & Accessories∞).

- The ordering code for a full frame arch-top café shutter is CS-ART.
- The ordering code for a full frame angle-top café shutter is CS-ANT.

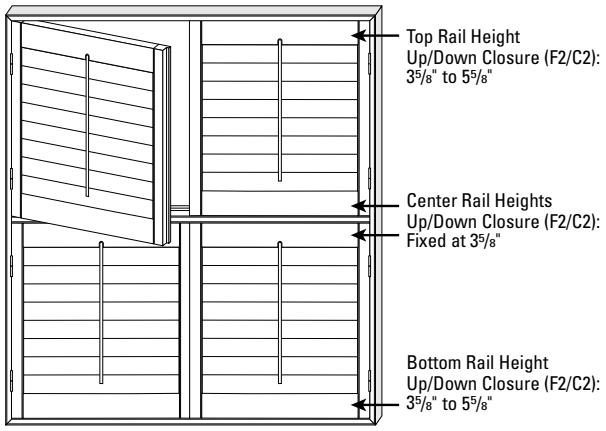
If café shutters are desired, it is important to order them as café, not as a standard hinged shutter with a 3-sided frame.

Café Style	Standard Hinged with 3-Sided Frame
Tops of panels and side frames receive extra finishing because they may be visible	Tops of panels and side frames receive standard finishing
Top of panel is flush with top of side frame	Top of panel is lower than top of side frame due to standard panel deductions
On IM shutters, no height deduction is taken on the side frames	On IM shutters, a 1/8" deduction will be taken on the side frames

Double-Hung Shutters (DH)

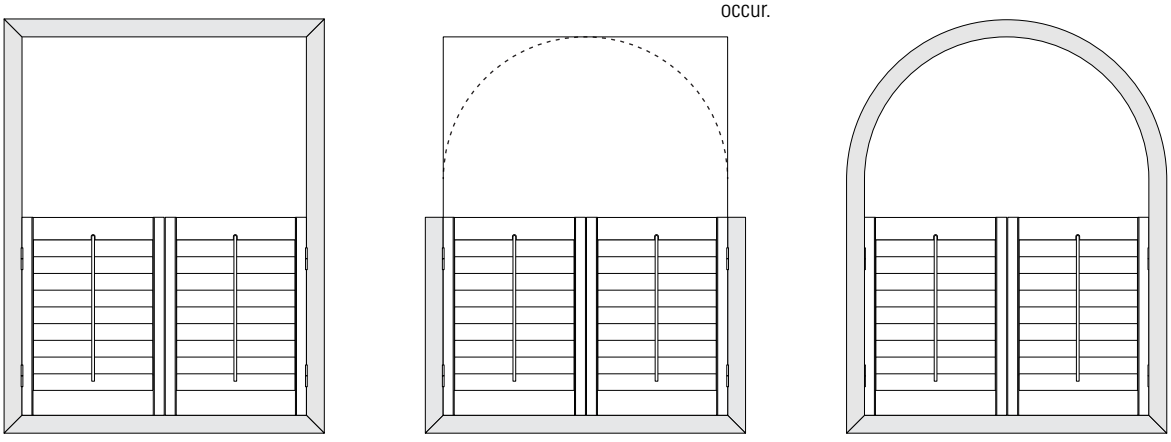
A Double-Hung shutter consists of two panels or groups of panels which are mounted separately, one above the other, and can swing open separately. There is a surcharge with this option (see Pricing – Surcharges & Accessories∞).

There will be a 1/8" gap between the top and bottom set of panels. A horizontal T-Post is recommended to stabilize panels and to block light. There may be variation in the horizontal T-Post position to keep the top and bottom rails of the panels equal size. A horizontal T-Post cannot be specified with Hang Strip applications.



Notes

- Double-Hung break placements, like divider rail placements, may vary up or down as much as 1" with 2 1/2" louvers, 1 1/2" with 3 1/2" louvers, and 2" with 4 1/2" louvers.
- Double-Hung shutters are not recommended when the single and combined panel width is greater than the height — panel sagging will occur.



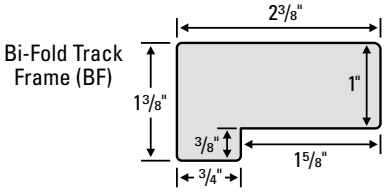
Full Frame | Three-Sided Frame | Full Frame Arch Top

Café Shutters Styles

Notes

- Vertical T-Posts are not recommended with three-sided or café applications due to possible lack of a stable mounting surface.

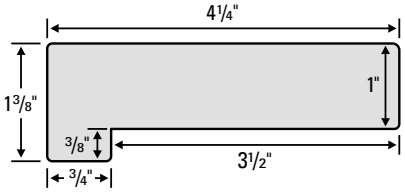
Bi-Fold Track Frame (BF)



The Bi-Fold Track Frame uses a single track on which hinged panels glide to open and close.

- Mounting type: inside or outside mount
- Flush inside mounting depth (without valance): 2 3/8"
- Minimum flat outside mounting surface: 1 3/8" (an additional 1 1/2" is required for the support bracket above the frame unless the frame is ceiling mounted)
- Face width: 1"
- Base width: 1 3/8"

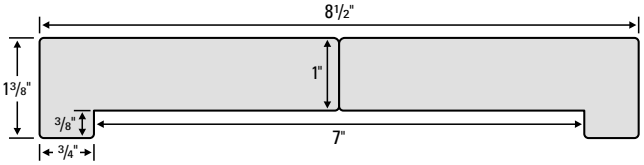
Bypass Track Frame (BP)



The Bypass Track Frame uses two tracks where panels can slide past each other with louvers in the closed position.

- Mounting type: inside or outside mount
- Flush inside mounting depth (without valance): 4 1/4"
- Minimum flat outside mounting surface: 1 3/8" (an additional 1 1/2" is required for the support bracket above the frame unless the frame is ceiling mounted)
- Face width: 1"
- Base width: 1 3/8"

Bypass Open Louver (BO) and Bypass Triple Track (BT) Frame



The Bypass Open Louver Frame uses two tracks where the panels can slide past each other with louvers in the open position. The Bypass Triple Track Frame uses three tracks where panels can slide past each other with louvers in the closed position.

- Mounting type: inside or outside mount
- Build-out is not recommended
- Frame projection: 8 1/2"

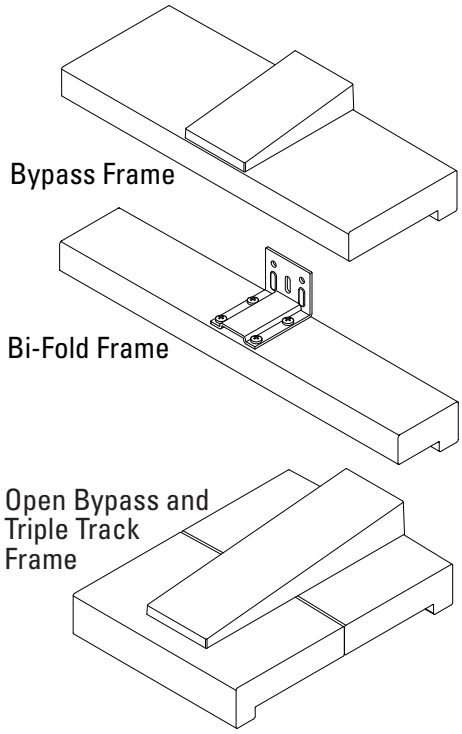
Divider Rails

A divider rail is required on track system applications when panels exceed 84" in height. Up to two are permitted.

Support Brackets

Support brackets come standard on all outside mount track configurations. Note that 1 1/2" of clearance is required above the frame for the bracket. In order to install the support brackets, there must be enough clearance above the frame for a tool.

- Installation of these brackets is critical for the lifetime operation of your shutters.

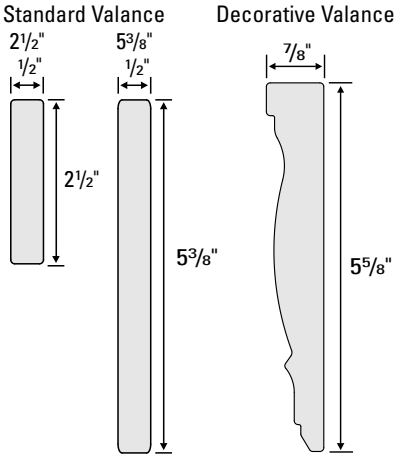


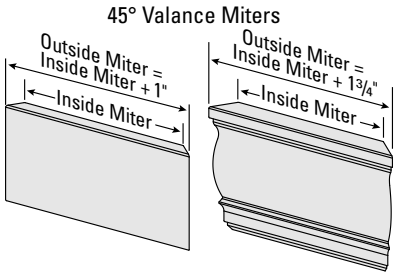
Notes

- Frames and valances greater than 115" in width or height may require splicing.
- Stiles are sent as privacy strips for Bypass Open Louver Track.
- Hang strips are sent as privacy strips for Bypass Triple Track.

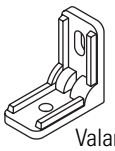
Valances

Three valances are offered for Bi-Fold and Bypass track configurations. The 2 1/2" Standard Valance and 5 3/8" Standard Valance have a simple design, which creates a classic look. The Decorative Valance features a detailed design that complements both modern and classic décor.

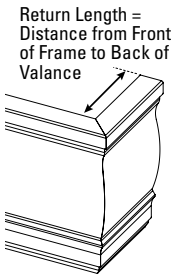




- L-brackets are provided to attach the valance.
- The top of the valance must be 1" or more above the top of the frame for the L-bracket to be used.


Valance L-Bracket

- On an outside mount, the standard return length equals the depth of the frame plus any ordered build-out. If a longer return is needed (example: mounting on top of molding), specify return length.



- If returns are desired for an inside mount, specify length when ordering (1" minimum).

	No Build-Out	1 Build-Out	2 Build-Outs
BF	2 3/8"	3 1/2"	4 5/8"
BP	4 1/4"	5 3/8"	6 1/2"
BO/BT	8 1/2"	9 5/8"	10 3/4"

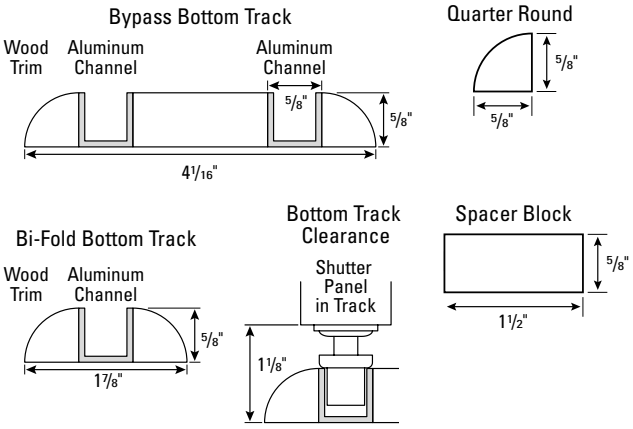
Notes
- Frames and valances greater than 115" in width or height may require splicing.

Bottom Tracks/Floor Guides

Bottom tracks or floor guides are strongly recommended for track configurations to improve panel functionality and performance.

Bottom Tracks

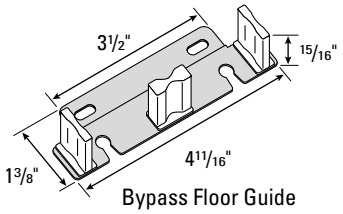
Optional bottom tracks are available for Bi-Fold and Bypass track configurations. Bottom tracks must be specified at the time of ordering regardless of frame configuration so that the factory can take an additional 1/2" deduction to allow for the height of the track. Bottom tracks run the full width of the opening.



Notes
- Bottom track quarter round and spacer block are available for ordering as lineal material.

Floor Guides

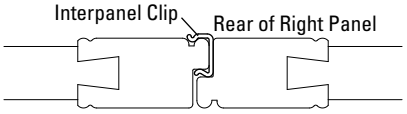
If desired, floor guides may be used on Bypass configurations (except Bypass Open Louver) instead of a bottom track. No additional height deduction is needed with floor guides.



Bypass Floor Guide

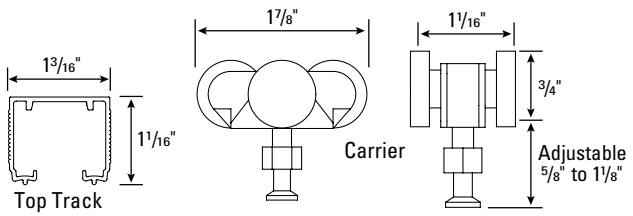
Bypass Track Interpanel Clips

Bypass track configurations use discreet interpanel clips to hold married panels together. The clip connects two panels so that they move as a single unit in the opening.

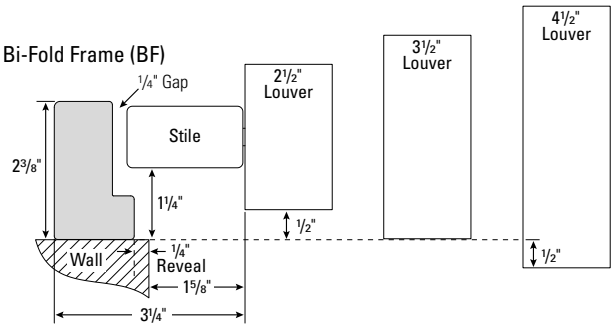


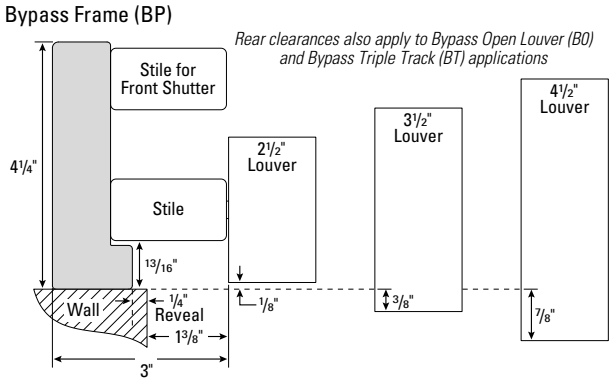
Top Track and Carrier Dimensions

Shown here are the dimensions of the top track and carriers.



Louver Rear Clearances



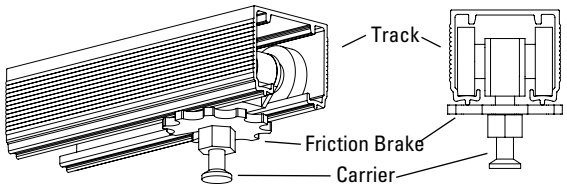


Notes

- For front tilt, allow an additional 1/4" for louver clearance from the back edge of the louvers. Always check for obstructions.
- A minimum depth of 1 1/2" is required to inside mount either the Bi-Fold or Bypass Frame.

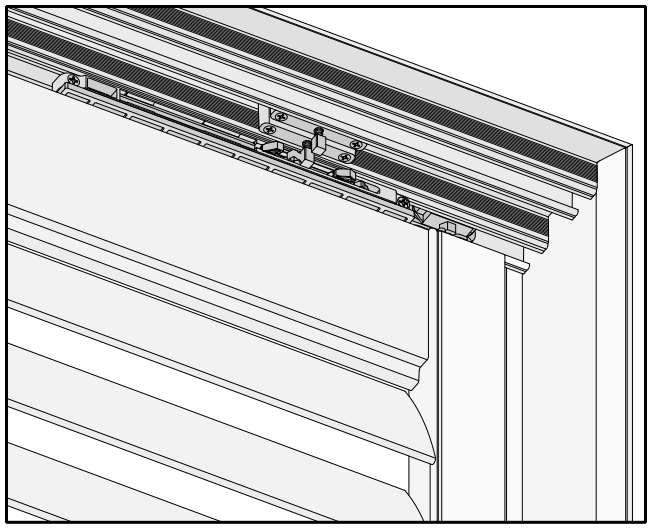
Friction Brake

In certain track installations, the panels may drift due to out-of-square window openings or settling of the home. The friction brake may be installed on one or more track system carriers to provide slight resistance and prevent panel drift.



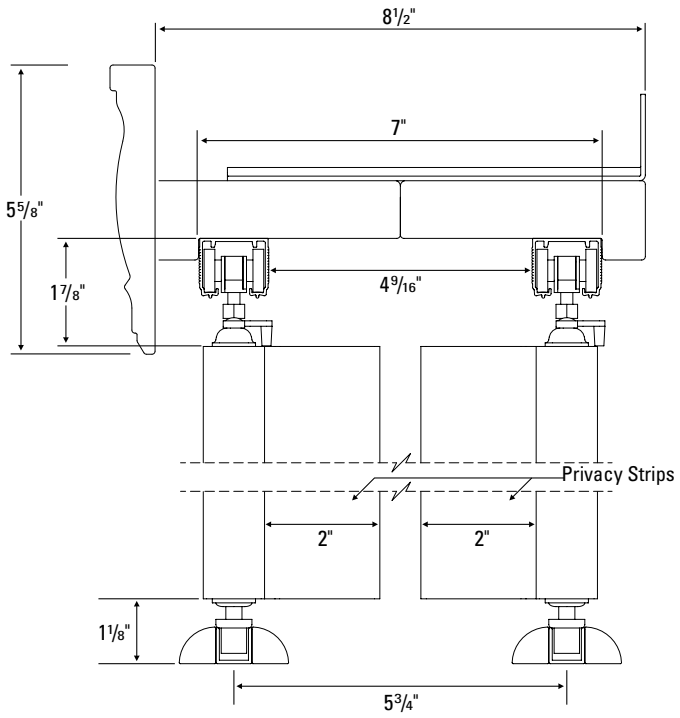
Controlled Close for Bypass

Controlled Close for Bypass is a mechanism for opening/closing bypass panels and will come standard on all bypass track systems. There are no measurement or deductions impacts when ordering. The Controlled Close for Bypass components will come pre-installed and may require slight adjustment at installation. During installation, panel placement will be important to ensure engagement of the Controled Close components. Panel configuration will need to be selected with care.

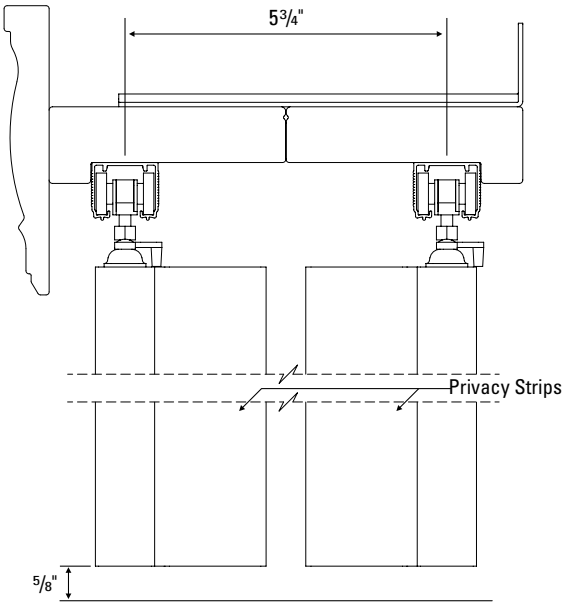


Bypass Open Louver and Bypass Triple Track Configuration Details with Bottom Track Options

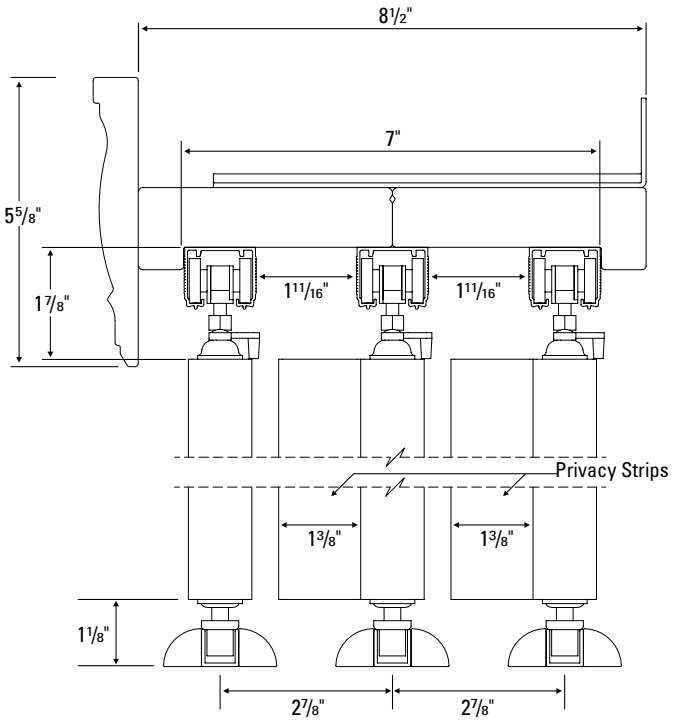
Bypass Open Louver with Bottom Track



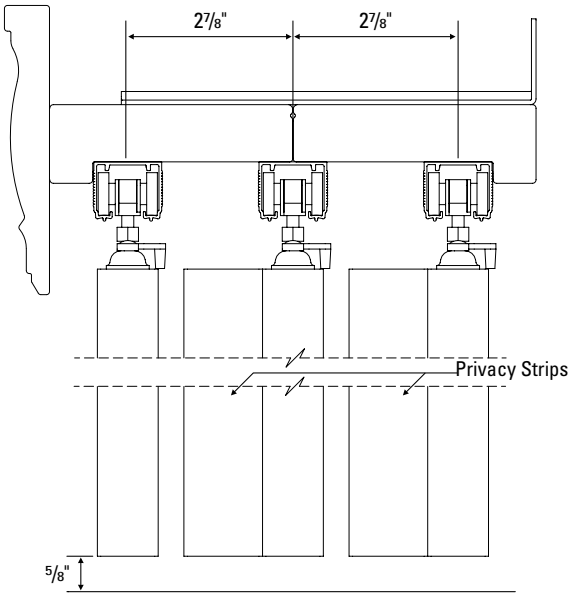
Bypass Open Louver with No Bottom Track



Bypass Triple Track with Bottom Track



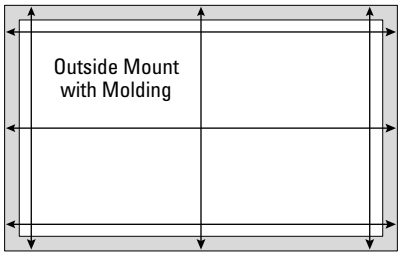
Bypass Triple Track with No Bottom Track



Outside Mount with Molding

Mounting around molding requires sufficient wall structure to securely mount the frame.

1. Measure the width from outside of molding to outside of molding at the top, middle, and bottom. Record all three measurements.
2. Measure the height from outside molding to outside molding at the left, center, and right. Record all three measurements.

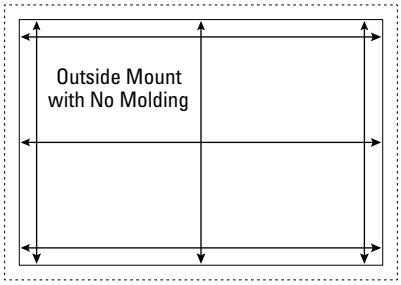


3. To determine ordered size, add the appropriate overlap factors from the Outside Mount Frame Overlap chart.

The ordered measurements will be the finished size of the shutter including the frame.

Outside Mount with No Molding

1. Measure the width inside the opening at the top, middle, and bottom. Record all three measurements.
2. Measure the height inside the opening at the left, center, and right. Record all three measurements.



3. To determine ordered size, add the appropriate overlap factors from the Outside Mount Frame Overlap chart.

The ordered measurements will be the finished size of the shutter including the frame.

Outside Mount Frame Overlap	
Track Type	**Overlap per Frame Side**
Bi-Fold Track	1 5/8"
Bypass Track	1 5/8"

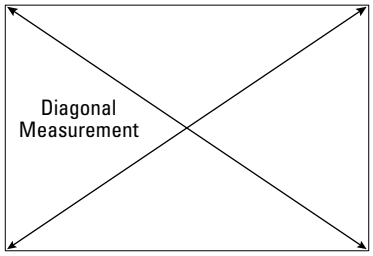
Notes

- Overlap factor provides for the frame base plus a 1/4" reveal per frame side.

Inside Mount with Frame

Inside mounts can be challenging. Cranks, latches, depth, and squareness of the window opening must be considered. For inside mounts, all measurements should be exact and measured to the nearest 1/16".

1. Measure the width inside the opening at the top, middle, and bottom. Record all three measurements and order the smallest measurement.
2. Measure the height inside the opening at the left, center, and right. Record all three measurements. Order the smallest measurement.
3. To determine squareness, measure diagonally from top left to bottom right and from top right to bottom left. If the measurements are not equal, the opening is not square. Reduce the ordered size accordingly or if the measured difference is greater than 1/2" consider an outside mount.



The ordered measurements are the size from which frame deductions will be taken. Inside mount factory deductions are 1/4" from ordered width and height on four-sided frames. On three-sided frames the height deduction is 1/8".

Inside Mount Deductions

If different deductions than the 1/4" standard are required for framed inside mounted shutters, you must make adjustments to the dimensions when placing the order. See guidelines on the order form for more details.

Minimum Mounting Depths for Framed Configurations

For minimum mounting depths, refer to Track Components℠ for the louver clearance diagrams. Note that a minimum depth of 1 1/2" is required to inside mount Bi-Fold and Bypass Frames.

Inside Mount with No Frame

The same measuring procedures are used for both framed and unframed configurations. If the opening is not square, a framed configuration is highly encouraged.

Notes

- If no frame is used, small light gaps will exist around the edges of the panels.

Minimum Mounting Depths for Unframed Configurations

A minimum depth of 1 3/8" is required for Bi-Fold track configurations without frames, and a minimum of 3 1/2" is required for Bypass track configurations without frames.

Clearance Information

Panel Clearance

Panel-to-floor clearance of 5/8" is provided on inside- and outside-mounted Bi-Fold and Bypass track configurations.

Additional panel clearance is needed if optional bottom tracks are used. Refer to Track Components℠ for the louver clearance diagrams.

Support Brackets

Support brackets come standard with all outside mounted track configurations. Note that 1 1/2" of clearance is required above the frame. See Track Frames and Components℠ for illustrations of the support brackets.

Notes

- For stackback measuring guidelines, refer to Bi-Fold Track Configurations℠ and Bypass Track Configurations℠.

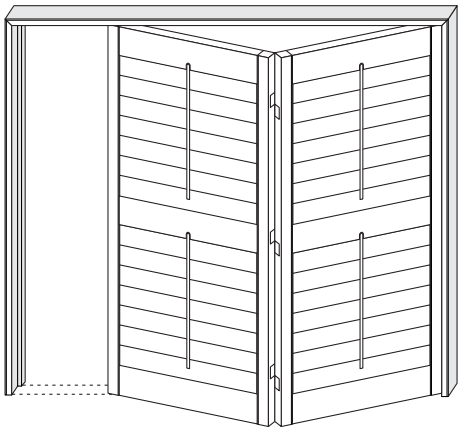
Bi-Fold Track Configurations
LEVOLOR® PREMIER™ COMPOSITE SHUTTERS

Overview

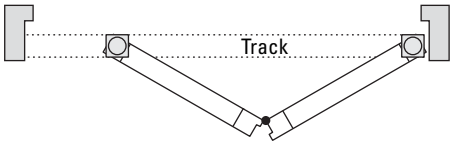
Bi-Fold track configurations use a top track and optional bottom track on which the shutter panels glide to open and close. They are designed in multiples of two panels (two, four, or six) which are hinged together in a variety of configurations.
A maximum of six panels can be hinged together. Bi-Fold track configurations are most commonly used in extra wide windows such as sliding doors and are typically ordered with three-sided frames.
Notes

- When ordering a Bi-Fold track configuration, it is advised to order the optional bottom track to improve alignment and functionality.
- Minimum and maximum ordered widths are based on outside mount applications.

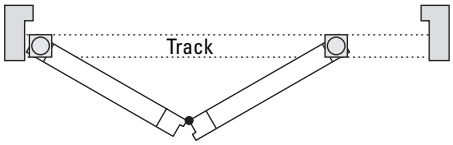
Two Panels



BF-2R

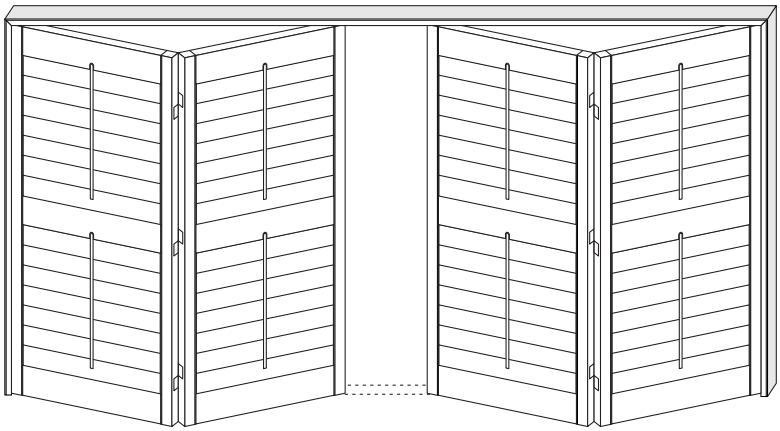


BF-2L

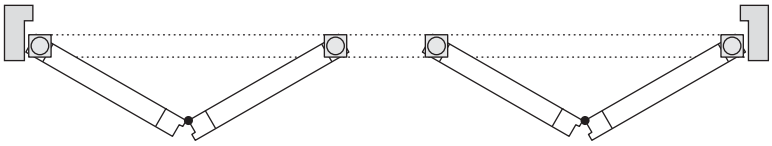


	Ordered Width	
Frame	**Minimum**	**Maximum**
BF	26 3/16"	50 3/16"
N	24 3/16"	48 3/16"

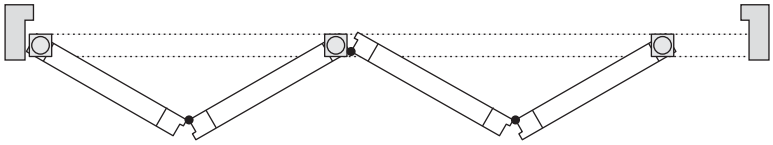
Four Panels

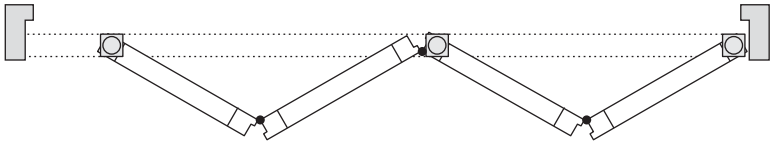


BF-2L/2R



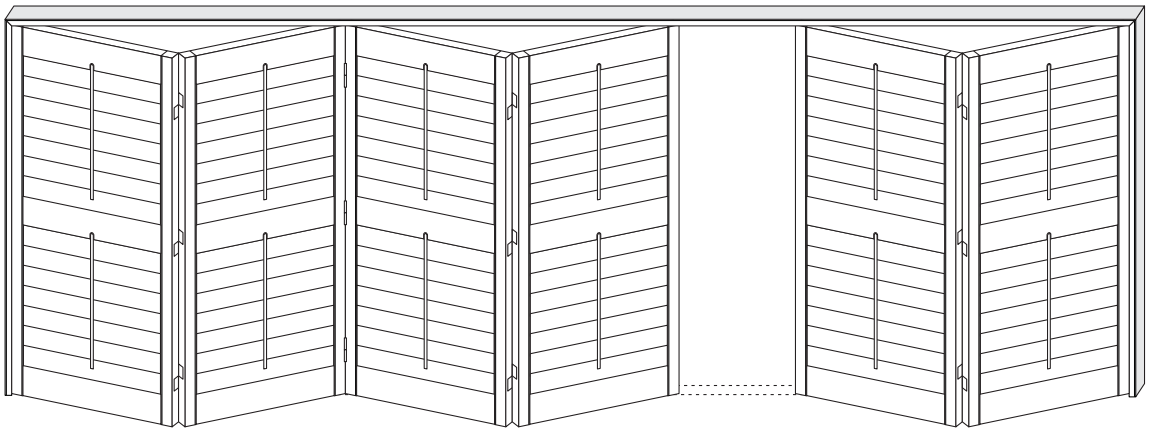
	Ordered Width	
Frame	**Minimum**	**Maximum**
BF	50"	98"
N	48"	96"



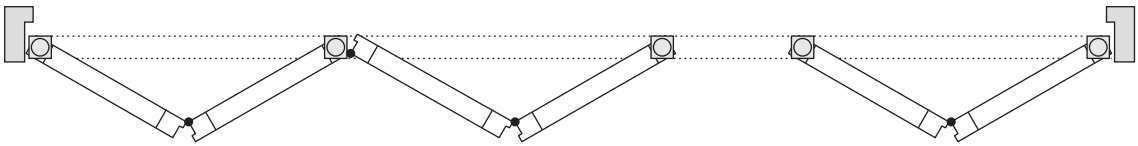


	Ordered Width	
Frame	**Minimum**	**Maximum**
BF	50 1/8"	98 1/8"
N	48 1/8"	96 1/8"

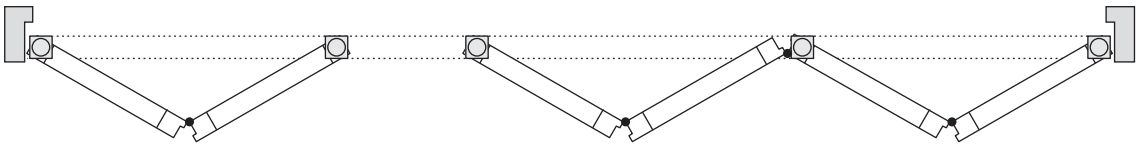
Six Panels



BF-4L/2R

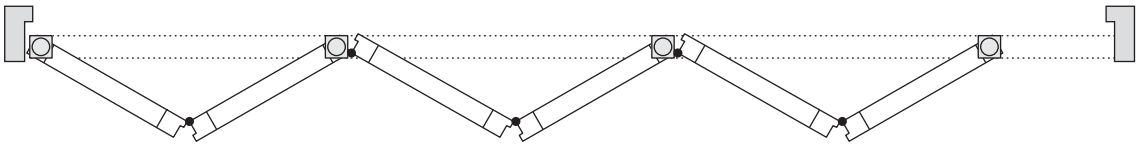


BF-2L/4R

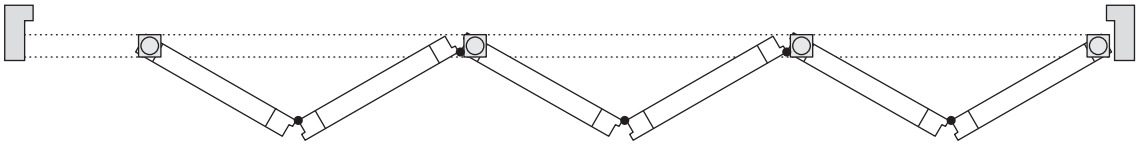


	Ordered Width	
Frame	**Minimum**	**Maximum**
BF	$73^{11}/_{16}$"	$145^{11}/_{16}$"
N	$71^{11}/_{16}$"	$143^{11}/_{16}$"

BF-6L



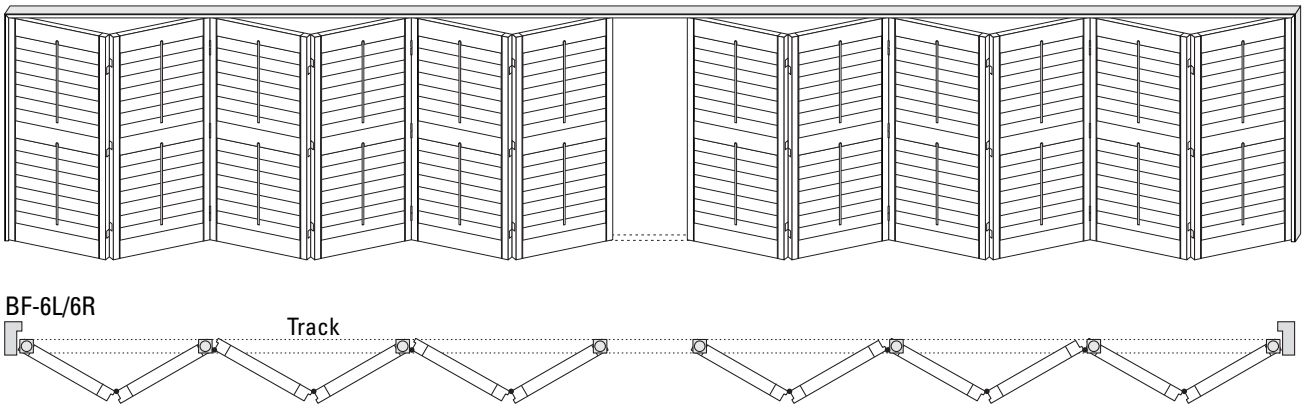
BF-6R



	Ordered Width	
Frame	**Minimum**	**Maximum**
BF	$73^{9}/_{16}$"	$145^{9}/_{16}$"
N	$71^{9}/_{16}$"	$143^{9}/_{16}$"

Notes
- Other multiple panel arrangements are possible, including eight and ten panels. Consult Customer Service for details.
- Minimum and maximum ordered widths are based on outside mount applications.

Twelve Panels



	Ordered Width	
Frame	**Minimum**	**Maximum**
BF	144 3/4"	288 3/4"
N	142 3/4"	286 3/4"

Notes
- Minimum and maximum ordered widths are based on outside mount applications.

Stackback Design

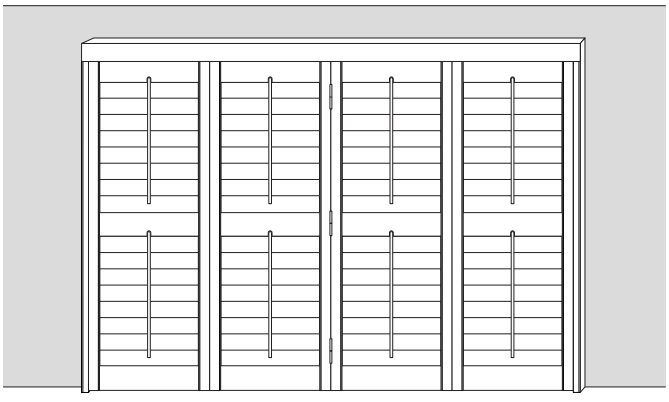
A stackback design enables the panels of a Bi-Fold track configuration to be pushed away from the opening and completely uncover it. This is achieved by extending the top frame and track a distance equal to 2" for each pivot point at the far ends of the installation, plus 4" per set of panels. A pivot point is the stationary location on the frame sides where panels are anchored and fold away from the opening.

Examples:

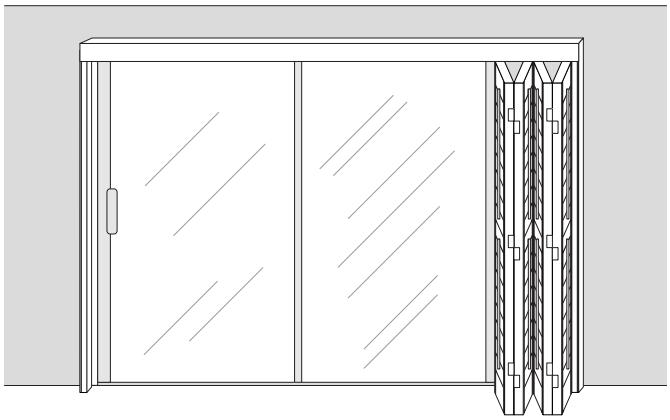
4L has one pivot point on the left. 2L/2R has two pivot points, one on the left and one on the right.

In the illustration below, a four-panel Bi-Fold track configuration is extended by the needed distance to stack the panels back. This design is usually considered when a customer desires more view and wall space is available.

Bi-Fold Stackback Design – Closed



Bi-Fold Stackback Design – Open



Notes
- On a Bi-Fold stackback design, a portion of the wall is hidden behind the shutter panel, and there may be limited louver operation.
- In Bi-Fold track stackback applications, the Ordered Width and the stackback width are the same.

Bypass Track Configurations
LEVOLOR® PREMIER™ COMPOSITE SHUTTERS

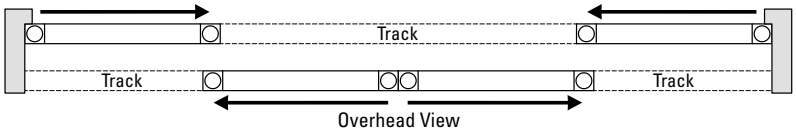
Overview

Bypass track configurations use two or three tracks and floor guides on which the shutter panels glide to open and close. It is designed for multiple panels (two, three, four, five, six, or eight) which are used individually or attached in sets in a variety of configurations. Bypass track configurations are most commonly used in extra wide windows such as sliding doors and are typically ordered with three-sided frames. With Bypass track configurations, floor guides are used to hold the panels in alignment when operating the shutters or subjecting them to wind. An optional Bypass bottom track is also available if the consumer prefers this over the floor guides. Discreet interpanel clips are used to marry multiple panels together when ordered in sets.

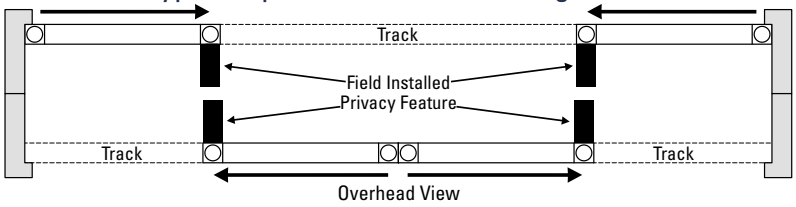
Notes

- Minimum and maximum ordered widths are based on outside mount applications.
- Units with panel widths less than 27 1/2" may not be built with Controlled Close for Bypass depending on the configuration. A pop-up in DirectConnect™ will indicate when a unit cannot be made with Controlled Close for Bypass.
- Bypass panel overlaps of 1 5/8" are accounted for in minimum and maximum ordered widths.
- All panel configurations are available as standard Bypass or Bypass Open Louver configurations.

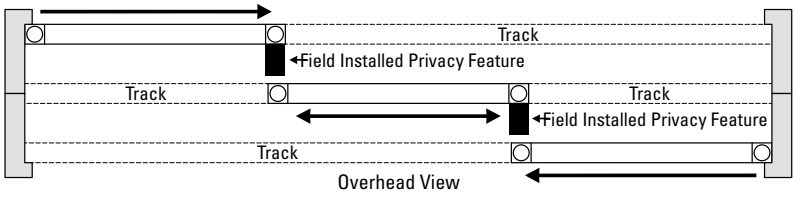
Bypass Track Configuration



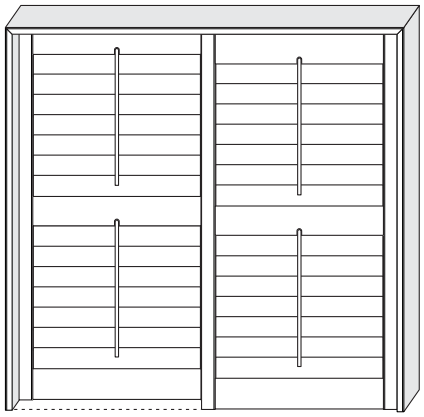
Bypass Open Louver Track Configuration



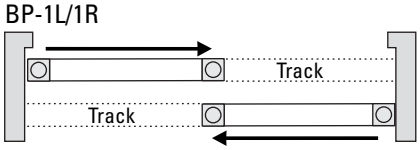
Bypass Triple Track Configuration



Two Panels

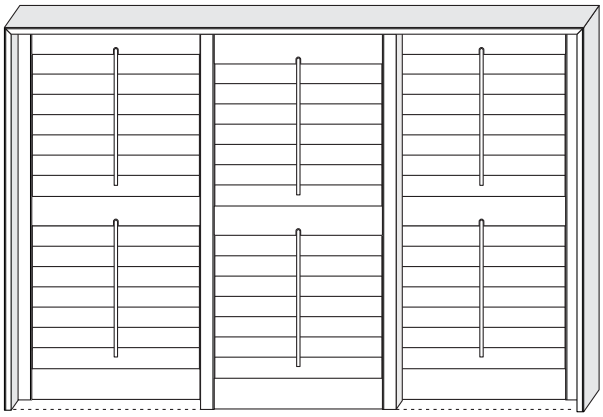


BP-1L/1R

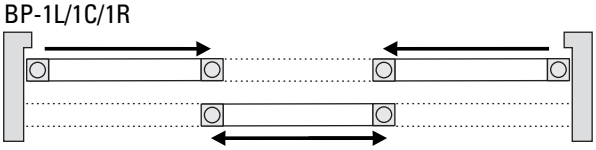


	Ordered Width	
Frame	**Minimum**	**Maximum**
BP	24 3/8"	72 3/8"
Single Stackback	23 3/8"	71 3/8"
N, Double Stackback	22 3/8"	70 3/8"

Three Panels



BP-1L/1C/1R

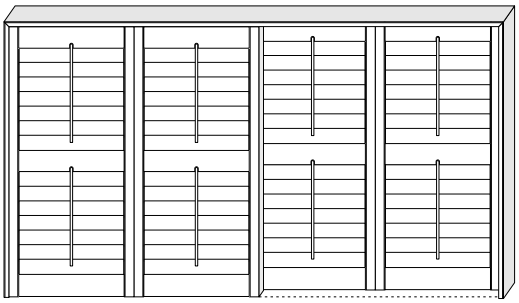


	Ordered Width	
Frame	**Minimum**	**Maximum**
BP	34 3/4"	106 3/4"
Single Stackback	33 3/4"	105 3/4"
N, Double Stackback	32 3/4"	104 3/4"

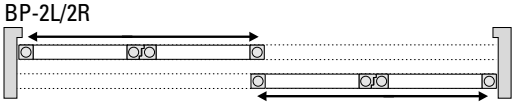
Notes

- Available with two or three tracks.

Four Panels

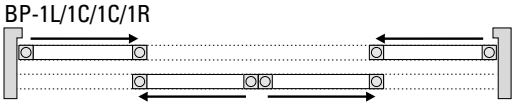


BP-2L/2R



	Ordered Width	
Frame	**Minimum**	**Maximum**
BP	48 1/16"	144 1/16"
Single Stackback	47 1/16"	143 1/16"
N, Double Stackback	46 1/16"	142 1/16"

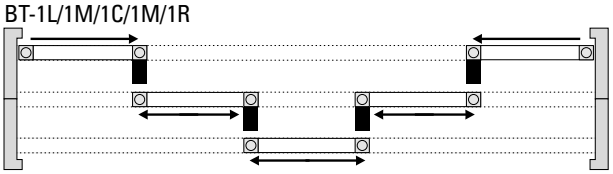
BP-1L/1C/1C/1R



	Ordered Width	
Frame	**Minimum**	**Maximum**
BP	46 3/4"	142 3/4"
Single Stackback	45 3/4"	141 3/4"
N, Double Stackback	44 3/4"	140 3/4"

Five Panels

BT-1L/1M/1C/1M/1R



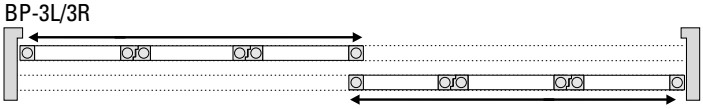
	Ordered Width	
Frame	**Minimum**	**Maximum**
BP	55 1/2"	175 1/2"
Single Stackback	54 1/2"	174 1/2"
N, Double Stackback	53 1/2"	173 1/2"

Notes

- Minimum and maximum ordered widths are based on outside mount applications.

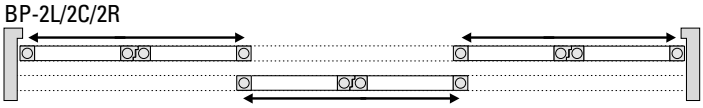
Six Panels

BP-3L/3R



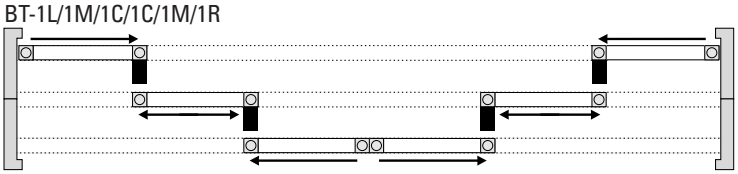
	Ordered Width	
Frame	**Minimum**	**Maximum**
BP	71 3/4"	215 3/4"
Single Stackback	70 3/4"	214 3/4"
N, Double Stackback	69 3/4"	213 3/4"

BP-2L/2C/2R



	Ordered Width	
Frame	**Minimum**	**Maximum**
BP	70 5/16"	214 5/16"
Single Stackback	69 5/16"	213 5/16"
N, Double Stackback	68 5/16"	212 5/16"

BT-1L/1M/1C/1C/1M/1R

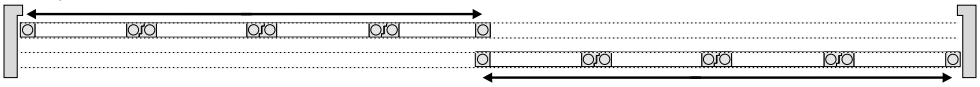


Notes
- Available with two or three tracks.

	Ordered Width	
Frame	**Minimum**	**Maximum**
BT	67 1/2"	211 1/2"
Single Stackback	66 1/2"	210 1/2"
N, Double Stackback	65 1/2"	209 1/2"

Eight Panels

BP-4L/4R



	Ordered Width	
Frame	**Minimum**	**Maximum**
BP	95 7/16"	287 7/16"
Single Stackback	94 7/16"	286 7/16"
N, Double Stackback	93 7/16"	285 7/16"

Notes
- Minimum and maximum ordered widths are based on outside mount applications.
- Other multiple panel arrangements are possible, including 10 or 12 panels. Consult Customer Service for details.

Stackback Design

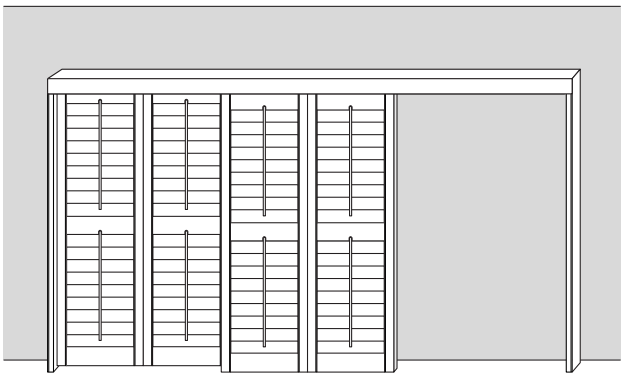
A stackback design enables both the front and rear panels of a Bypass track configuration to be slid away from the opening and completely uncover it. In the illustration below, a four-panel Bypass track configuration is extended by a distance equal to the width of two panels. This type of stackback configuration comes with design limitations. When the panels are closed, covering the glass, the valance and frame appear to be free floating on the wall, as seen in the illustration below.

However, one or both of the side frames may be eliminated if the top frame abuts one or both walls, or is an inside mount or ceiling mount. This provides a very clean look to the installation but assumes proper mounting is available.

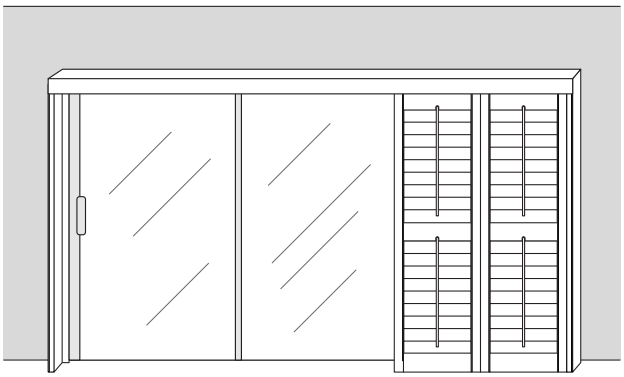
Notes

- When ordering a Bypass with stackback you must provide ordered width and stackback width. You must also indicate whether the stackback will be to the left, right, or both left and right. This information is required to calculate correct panel widths including $1^{5}/_{8}$" panel overlaps.

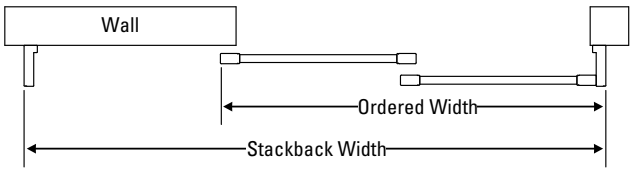
Bypass Stackback Design — Closed



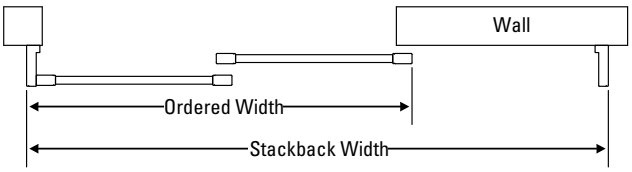
Bypass Stackback Design — Open



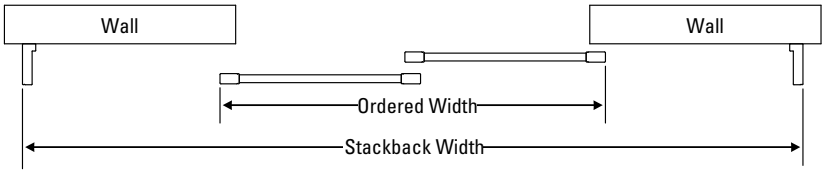
Bypass Single Stackback (Left)



Bypass Single Stackback (Right)



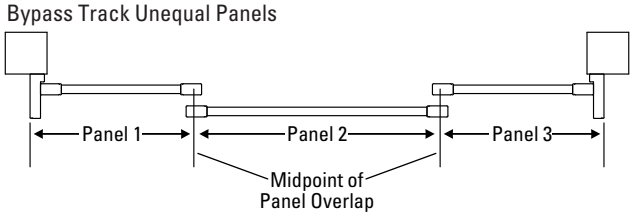
Bypass Double Stackback (Left-Right)



Bypass Track Unequal Panels

As standard, panel widths will be equal within an opening. If varying panel widths are required, specify as unequal panels in special instructions on the order form and provide panel measurements as shown at right.

Bypass Track Unequal Panels



The Basics

Arch top and angle top panels allow coverage of specialty shaped windows with continuous panels. The arch top may be in the shape of an arch or a quarter circle.

- Available as inside or outside mount.
- Available framed or unframed.
- Available as single or multiple panel configurations.
- French door cut-outs are available on arch top and angle top panels.

Possible arch top and angle top configurations are the same as standard hinged panel configurations, see Standard Hinged Panels℠.

Sample arch top and angle top configurations are shown in Arch Top and Angle Top℠. For panels that are hinged on the tall side, the backs will be chamfered for clearance purposes, which may result in light gaps.

Materials and Finish

Some arch top and angle top panels may contain real wood or solid core poly materials finished to coordinate with Composite Shutter colors. See Specialty Shapes℠ for more details.

Louver Operation

Louvers in an arch top or angle top panel are horizontal. A rear tilt bar may be used to provide as many operable louvers as possible. Louvers that cannot be connected to a tilt bar will operate independently. In some cases, some louvers may be fixed closed.

On arch top and angle top panels with Front Tilt or Concealed Tilt, if the louvers in the arched or angled area cannot be attached to the unit's tilt bar, the remaining louvers will either be individually moveable or grouped separately with a rear tilt bar. In the latter case, an additional $^{7}/_{16}$" depth is required for rear clearance. This includes the 1/4" standard recommended clearance and the 3/16" clearance for the rear tilt bar.

Up/down closure (F2 or C2) may be ordered for arch/angle top panels to ensure a bottom rail that coordinates with rectangular panels within a room. Louvers near the top of the shutter will have limited rotation due to the shape of the arch/angle. These louvers may not rotate past the horizontal position. Tight closure will be in the upward position only, even if the shutters are ordered with up/down closure. Ordering a divider rail or split tilt near the shoulder will achieve full louver rotation below the shoulder height. For split tilt, the louvers above the split tilt need to be in the open position for full louver rotation below.

An extension pole that extends to 96" is available for hard-to-reach louvers.

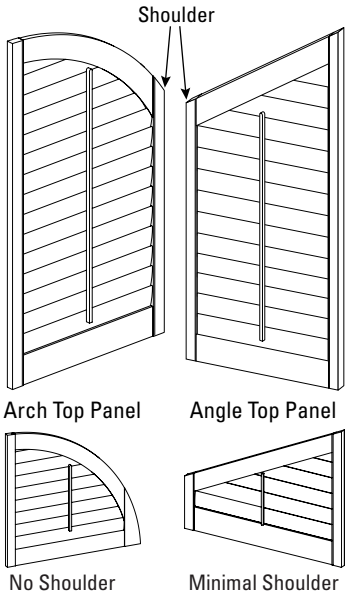
Arch Top/Angle Top Panels With or Without Shoulder

The shoulder is unique to arch top and angle top panels. The shoulder is the point where the arch or angle begins.

- Shoulder height is recorded as left and/or right height.
- Minimum shoulder height: 0"
- Minimum panel height: 18"

Notes

- Depending on shoulder height, panel configurations may be limited.



Frame Splicing

Frames on arch top panels greater than 30" wide may be spliced at the center top of the arch.

Product Specifications

The following specifications are the same for arch top and angle top panels as they are for standard hinged panels. Depending on shoulder height, specifications may vary.

- Size standards (with the exception of minimum panel height, which is 18")
- Number of panels
- Divider rail requirements
- Number of hinges per panel height

Track configurations are not available in arch top or angle top panels.

Notes

- Entire height of a divider rail location must always be located below the shoulder of an arch or angle top panel.
- If a separate louver section is desired above the shoulder of the arch or angle, split tilt should be ordered.

Measuring Guidelines

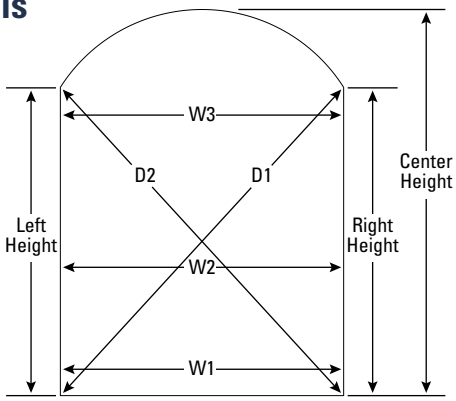
Measuring Guidelines Specific to Arch Top and Angle Top Panels

Arch top and angle top panels require key measurements and accurate communication of the measurements. Measure and record the measurements on the specialty shape order form. Examples of the measurements required for an arch top panel are shown at right.

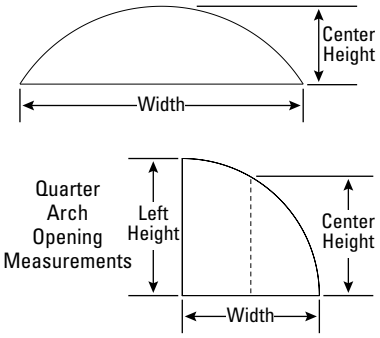
Notes

- Measuring can be challenging due to several factors. Cranks, latches, depth, and squareness of the window opening must be considered. All measurements should be taken to the nearest $^{1}/_{16}$".

Arch Top Panel with Shoulder Opening Measurements



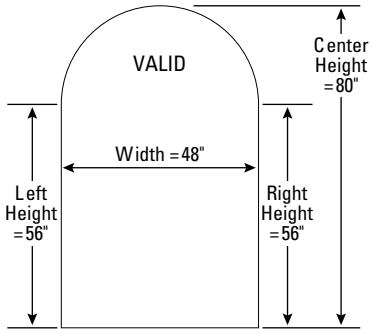
Arch Top Panel with No Shoulder Opening Measurements



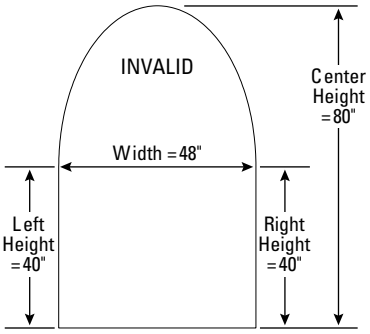
Checking for Valid Arch Top Measurements

Arch top panel shapes must have valid side height measurements. In many cases the left or right side height measurement is difficult to obtain due to the smooth transition from the straight side to the arch portion of the opening.

The measurements are valid when the side height (left or right) is equal to or greater than the center height minus one-half the width. If it is not, either adjust the side heights to a valid measurement or provide a template. See the examples at right.



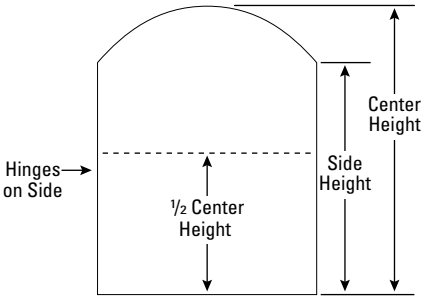
½ Width = 24"
80" – 24" = 56"
Measurements are valid because 56" is equal to the center height minus one-half the width.



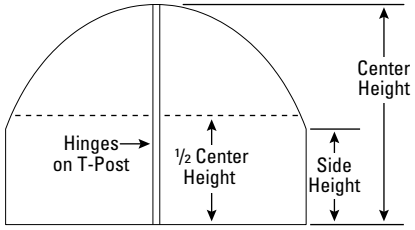
½ Width = 24"
80" – 24" = 56"
Measurements are invalid because 40" is less than the center height minus one-half the width.

Hinging and T-Posts

If the side height of an arch top/angle top panel shutter is greater than one-half the center height, the panel(s) may be hinged to the side(s). However, if the side height of the arch top/angle top panel shutter is equal to or less than one-half the center height, a vertical T-Post must be added and the panels will be hinged off the T-Post. Some example configurations are **RTL**, **RRTLL**, or **RTRTLTL**.



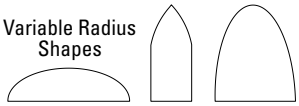
Hinges on Side



Hinges on T-Post

Notes

- Templates are required for all variable radius specialty shapes or openings that are irregularly shaped. See the Composite Shutters Specialty Shapes order form for details.



- Maximum widths and heights can vary depending on the radius.

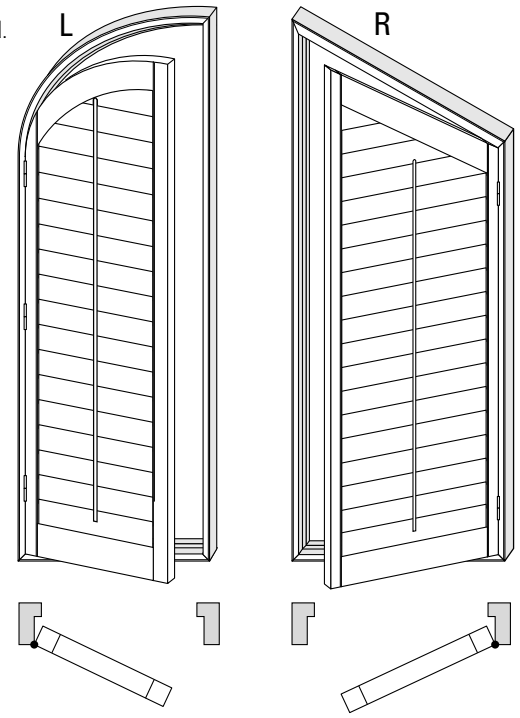
Panel Configurations

Overview

All standard hinged panel configurations shown in Standard Hinged Panels℠ may be used for arch top and angle top panels. However, in most cases, one or two panel configurations will be ordered. Those configurations are shown on this page.

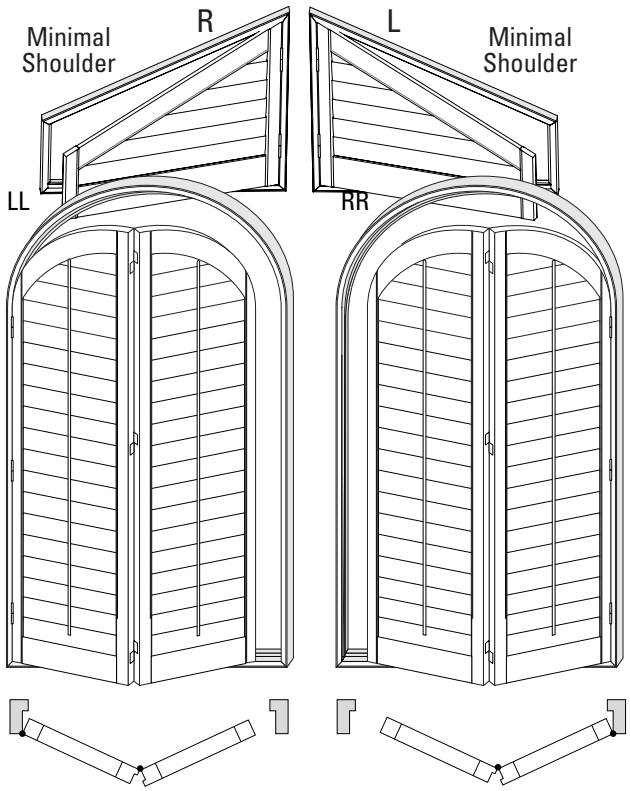
Notes

- The minimum and maximum ordered widths include frame and T-Posts as illustrated.



One Panel

		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	12 3/16"	36 1/8"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	13 15/16"	37 7/8"
	HSS	14 15/16"	39 1/8"
OM	N, HSB	12"	36"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	13 11/16"	37 5/8"
	HSS	14 15/16"	38 7/8"
	C61	16 7/16"	40 3/8"



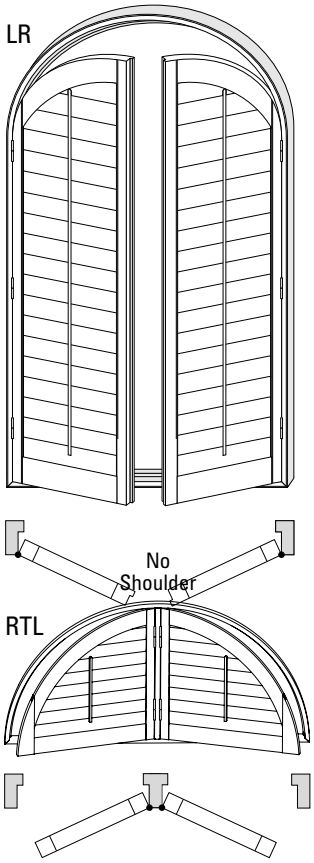
Two Panels — Bi-Fold

		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	24"	47 15/16"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	25 3/4"	49 11/16"
	HSS	26 3/4	50 15/16"
OM	N, HSB	23 7/8"	47 13/16"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	25 1/2"	49 7/16"
	HSS	26 3/4"	50 11/16"
	C61	28 1/4"	52 3/16"

Two Panels — Individually Hinged

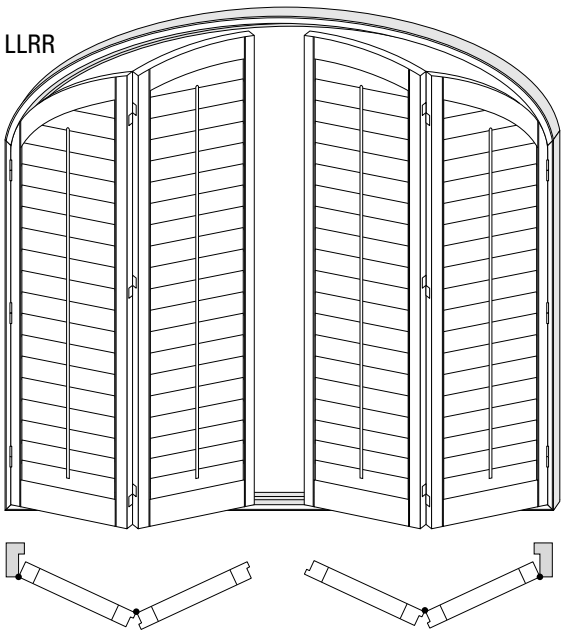
		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	24"	$71\frac{15}{16}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	$25\frac{3}{4}$"	$73\frac{11}{16}$"
	HSS	$26\frac{3}{4}$"	$74\frac{15}{16}$"
OM	N, HSB	$23\frac{13}{16}$"	$71\frac{13}{16}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	$25\frac{1}{2}$"	$73\frac{7}{16}$"
	HSS	$26\frac{3}{4}$"	$74\frac{11}{16}$"
	C61	$28\frac{1}{4}$"	$76\frac{3}{16}$"

		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	$25\frac{9}{16}$"	$73\frac{9}{16}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	$27\frac{5}{16}$"	$75\frac{5}{16}$"
	HSS	$28\frac{5}{16}$"	$76\frac{9}{16}$"
OM	N, HSB	$25\frac{7}{16}$"	$73\frac{3}{8}$"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	$27\frac{1}{16}$"	$75\frac{1}{16}$"
	HSS	$28\frac{5}{16}$"	$76\frac{5}{16}$"
	C61	$29\frac{13}{16}$"	$77\frac{13}{16}$"



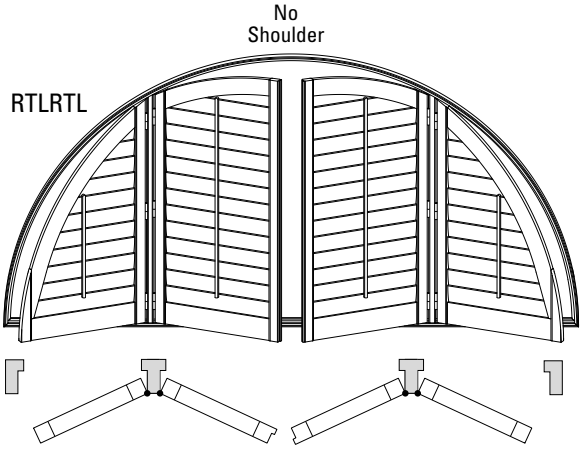
Four Panels — Bi-Fold

		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	47 5/8"	95 5/8"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	49 3/8"	97 3/8"
	HSS	50 3/8"	98 5/8"
OM	N, HSB	47 1/2"	95 7/16"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	49 1/8"	97 1/8"
	HSS	50 3/8"	98 3/8"
	C61	51 7/8"	99 7/8"



Four Panels — Individually Hinged

		Ordered Width	
Mount	**Frame**	**Minimum**	**Maximum**
IM	N, HSB, THS, Z67K, Z68K	50 13/16"	146 3/4"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K, Z62K, Z63K, Z66K	52 9/16"	148 1/2"
	HSS	53 9/16"	149 3/4"
OM	N, HSB	50 5/8"	146 5/8"
	L61K, L63K, L64K, L65K, L66K, L67K, L68K	52 5/16"	148 1/4"
	HSS	53 9/16"	149 1/2"
	C61	55 1/16"	151"



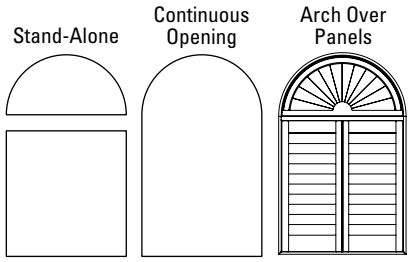
The Basics

Unframed and framed specialty shapes are available in solid colors, may be made with real wood or solid core poly material, and are finished to coordinate with our composite shutters colors.

Multiple specialty shapes are offered in the LEVOLOR® PREMIER™ Composite product line:

- Perfect arch (A1)
- Quarter circle (A2L or A2R)
- Extended quarter circle (A2L or A2R)
- Circle (A3)
- Extended eyebrow (A4)
- Extended arch (A4)
- Eyebrow (A5)
- Extended quarter eyebrow (A6L or A6R)
- Angle (A7L or A7R)
- Extended angle (A7L or A7R)
- Pentagon (A8)
- Oval (T1)
- Circle (T2)
- Hexagon (T3)
- Octagon (T4)

Both framed and unframed specialty shapes may be ordered as stand-alone shutters or combined with standard hinged panels below in a continuous opening.

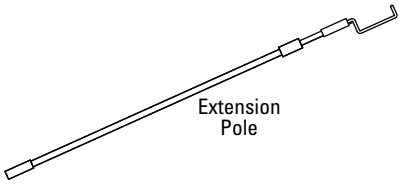


Louver Operation

Specialty shapes that start with an "A" code indicate a sunburst configuration, where individually operable louvers are arranged around a central hub.

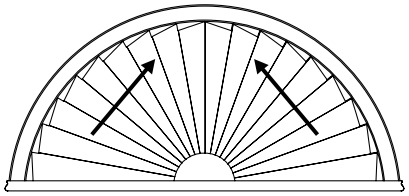
Shapes with a "T" code have horizontal louvers. All horizontal louver specialty shapes (T1–T4) are available with either front tilt or individually operable louver configurations. Note your operation preference on the Specialty Shapes order form.

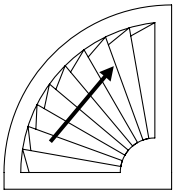
Louver movement may be limited in some cases, depending on the specialty shape. An extension pole that extends to 96" is available for hard to reach louvers.



Louver Closure

Louvers will always close upward from the horizontal to the tallest point of the shape.





The sunburst louvers in the arch above close upward toward center in two directions. In the quarter arch at left, the louvers close upward in one direction only.

Minimum Mounting Depths for Sunburst Louver Clearance	
Inside Mount	
Contemporary or Traditional Tilt-In Z-Frames	1 3/8"
Standard Z-Frame	2 7/16"
Traditional Z-Frame	2"
Contemporary Z-Frame	2 5/8"
Outside Mount	
1 5/8" Traditional L-Frame	1 3/8"
1 3/4" Traditional L-Frame	7/8"
1 3/4" Contemporary L-Frame	7/8"
2 3/8" Contemporary or Traditional L-Frames	1/2"
2 7/8" Contemporary or Traditional L-Frames	0"
Unframed Outside Mount	1 7/8"

Minimum Flush Mounting Depths for Sunburst Louver Clearance	
All L Frames	2 7/8"
Unframed Inside Mount	1 7/8"

Unframed Shapes

Unframed specialty shapes can be ordered as inside or outside mounts in stand-alone applications. When inside mounted, small gaps may be visible around the outside edges of the specialty shape. Unframed specialty shapes are installed with button catches.

Returns

Unframed specialty shapes may be ordered with or without returns.

- Returns add 1/2" per side on all unframed specialty shapes.
- Returns are not available on inside mount applications or T-shapes.

Framed Shapes

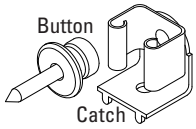
Framed specialty shapes may be ordered as inside or outside mounts. Any standard hinged panel frame can be ordered with framed specialty shapes. The shutter panel is hinged to the frame (with the exception of a bottom Sill Frame option) and opens for easy cleaning of the window. Note that the recommended minimum clearance depth is 1 1/2" to 2".

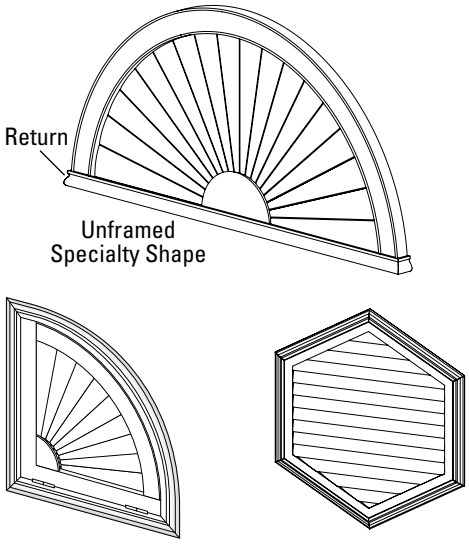
Number of Hinges by Width

- 2 hinges: 14" to 40"
- 3 hinges: 40 1/16" to 72"
- 4 hinges: 72 1/16" to 102"

Notes

- On framed specialty shapes with bottom Sill Frame, button catches, or magnets will be used in lieu of hinges. Hinge screws are too long for use with the Sill Frame.





Framed Specialty Shapes

Build-Out

To gain additional clearance for louver operation, build-out may be ordered for framed and unframed shapes. For build-out surcharges, see Pricing – Surcharges & Accessories℠.
There is a maximum of two build-outs per specialty shape.

Templates

Submitted templates will be reviewed before fabrication and compared to ordered dimensions for verification. A shape will be built as a single radius if the template dimensions are within 1/8" of a perfect radius. Contact Customer Service for further information on when a template is required.

Specifications

Sunburst Configuration Criteria

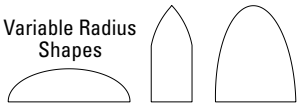
- All specialty shape louvers are in a sunburst orientation except T1–T4.
- Sunburst louvers always close upward from the horizontal to the tallest point of the shape.
- To order arch or angle window shapes with horizontal louvers, order as an arch or angle top panel format. See Arch Top and Angle Top Panels∞ for specifications.
- Framed and unframed shapes can be ordered inside mount (IM) or outside mount (OM).
- Framed specialties are available in all frames.
- Note key measurements on specialty shape order form.
- Sunburst specialty shapes can be used in stand-alone and continuous opening configurations (except circles).
- With specialty shapes in continuous openings greater than 60" wide, a vertical T-Post is required in the panel configuration which sits below the specialty shape.
- Due to the wide overlaps of the Casing Frame, complete alignment between an unframed specialty shape and a framed shutter can be achieved, but louver rotation will be limited.
- Sunburst specialty shape maximum louver reach is 51" from center of the hub to the furthest point.
- For unframed outside mount shapes, maximum overlap is $1\frac{3}{4}$" per side.

Measuring

Perform the measurements indicated on the specialty shape order form for the specific shape being ordered.

Notes

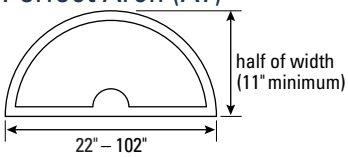
- Hub sizes will vary based on the width and height. Wider and taller openings require larger hubs. Companion shapes with varying widths and heights will have different hub sizes.
- Templates are required for all variable radius specialty shapes or openings that are irregularly shaped. See order form for details.



- Maximum widths and heights can vary depending on the radius.

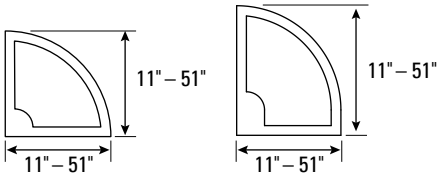
Opening Guidelines: Sunburst Louvers, No Templates

Perfect Arch (AT)



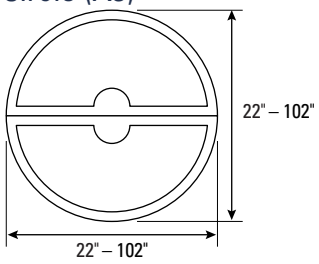
- The height of a Perfect Arch measures one-half the width. If the height measures more than half the width, specify an Extended Arch (A4). If the height measures less than half the width, specify an Eyebrow (A5).

Quarter Circle/Extended Quarter Circle (A2)

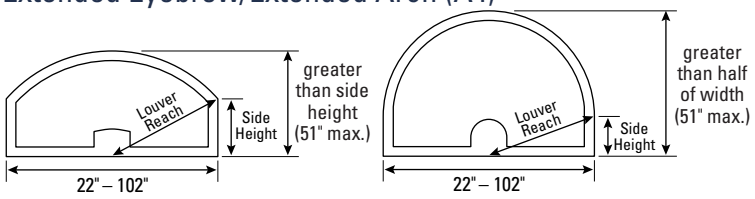


- Order as left (A2L) or right (A2R) quarter circle.

Circle (A3)

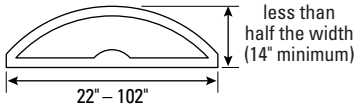


Extended Eyebrow/Extended Arch (A4)



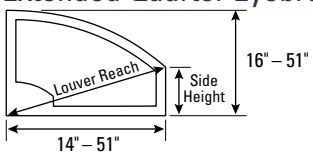
- Maximum louver reach: 51".
- Extended eyebrows with similar side height and center height have the greatest possibility of limited louver movement.

Eyebrow (A5)



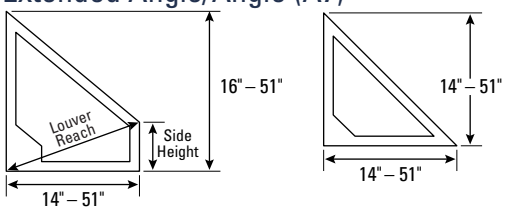
- Maximum height is less than half of the ordered width.
- Short, wide eyebrows have the greatest possibility of limited louver movement.

Extended Quarter Eyebrow (A6)



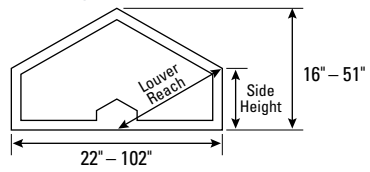
- Maximum louver reach: 51".
- Order as left (A6L) or right (A6R) extended quarter eyebrow.
- Extended quarter eyebrows with similar side height and center height have the greatest possibility of limited louver movement.

Extended Angle/Angle (A7)



- Maximum louver reach: 51".
- Order as left (A7L) or right (A7R), with or without a side height.

Pentagon (A8)

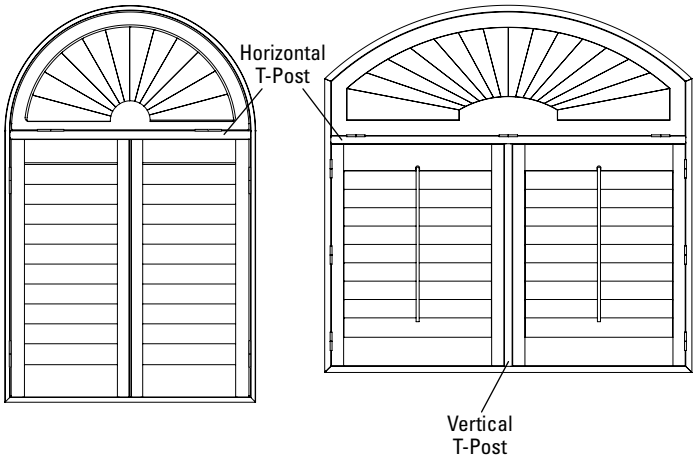


- Maximum louver reach: 51".
- Available as symmetrical only.
- Peak cannot be offset; it must be in center.

Continuous Frame — Sunburst Specialty Over Panels

In a continuous frame with specialty over panels, the specialty is supported by a horizontal T-Post. All frames can be used in this configuration. Openings greater than 60" wide require a vertical T-Post for the shutter configuration which sits below the specialty shape.

Continuous Frame
Sunburst Specialty Over Panels

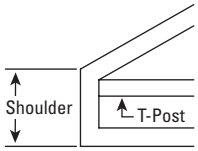


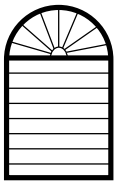
Measuring and Ordering

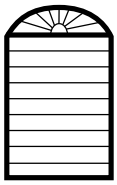
All necessary measurements for specialty shapes are shown on specialty order forms. Use the specialty order form to order the specialty and panels below as one line item. See the order form for more details.

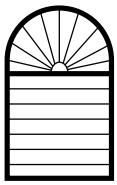
T-Post and Divider Rail Placement Guidelines

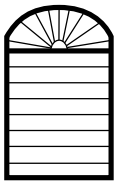
- Entire height of a horizontal T-Post or divider rails must always be below the shoulder.
- Finished location may vary up or down from the specified location.

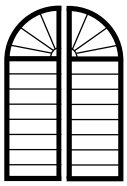


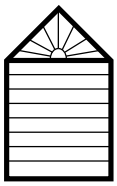
Framed Arch Sunburst Over Panels

Codes: A1-SH

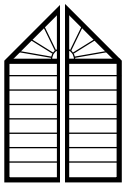
Framed Eyebrow Sunburst Over Panels

Codes: A5-SH

Extended Arch Sunburst Over Panels

Codes: A4-SH

Extended Eyebrow Sunburst Over Panels

Codes: A4-SH

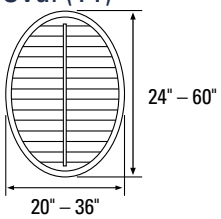
Framed Quarter Arch/Eyebrow Sunburst Over Panels

Codes: A2L-SH A6L-SH | Codes: A2R-SH A6R-SH

Framed Pentagon Sunburst Over Panels

Codes: A8-SH

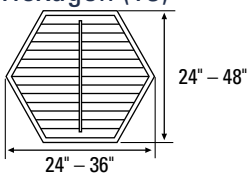
Framed Quarter Angle or Extended Angle Sunburst Over Panels

Codes: A7L-SH | Codes: A7R-SH

Opening Guidelines: Horizontal Louvers

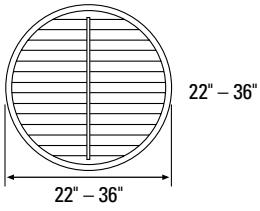
Oval (T1)



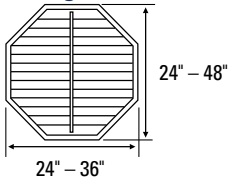
Hexagon (T3)



Circle (T2)



Octagon (T4)



Notes

- Horizontal louver specialty shapes T1 – T4:
  - Are available framed or unframed.
  - Are not available hinged due to lack of sufficient hinging surface.
  - Can be ordered with front tilt or individually operable louvers.
  - Templates are required for all Ovals (T1) and variable radius specialty shapes or openings that are irregularly shaped. If a specialty window is not symmetric but you are able to design a shutter to fit with a symmetric design, a template is not required. This applies to the following specialty shapes: Circle (T2), Hexagon (T3), and Octagon (T4).
- Specialty shapes with horizontal louvers do not have returns.
- Horizontal louver specialty shapes are available in 2½", 3½", and 4½" louver sizes.
- Other shapes and opening types may be possible as shown below. Consult Customer Service for details.



Unframed Ordering Considerations

Unframed Shape Over Standard Shutter

Standard Shutter Mounting

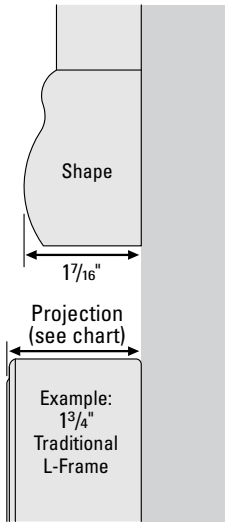
To balance the appearance of an outside mounted unframed specialty shape, consider the projection difference between your specialty shape and the framed unit below.

The illustrations below show front views of specialty shapes with various frame types. Note that either the arch radius or the returns may be used to achieve an aligned look with the standard shutter.

Notes

- Check for enough clearance between bottom of specialty shape and top of frame.

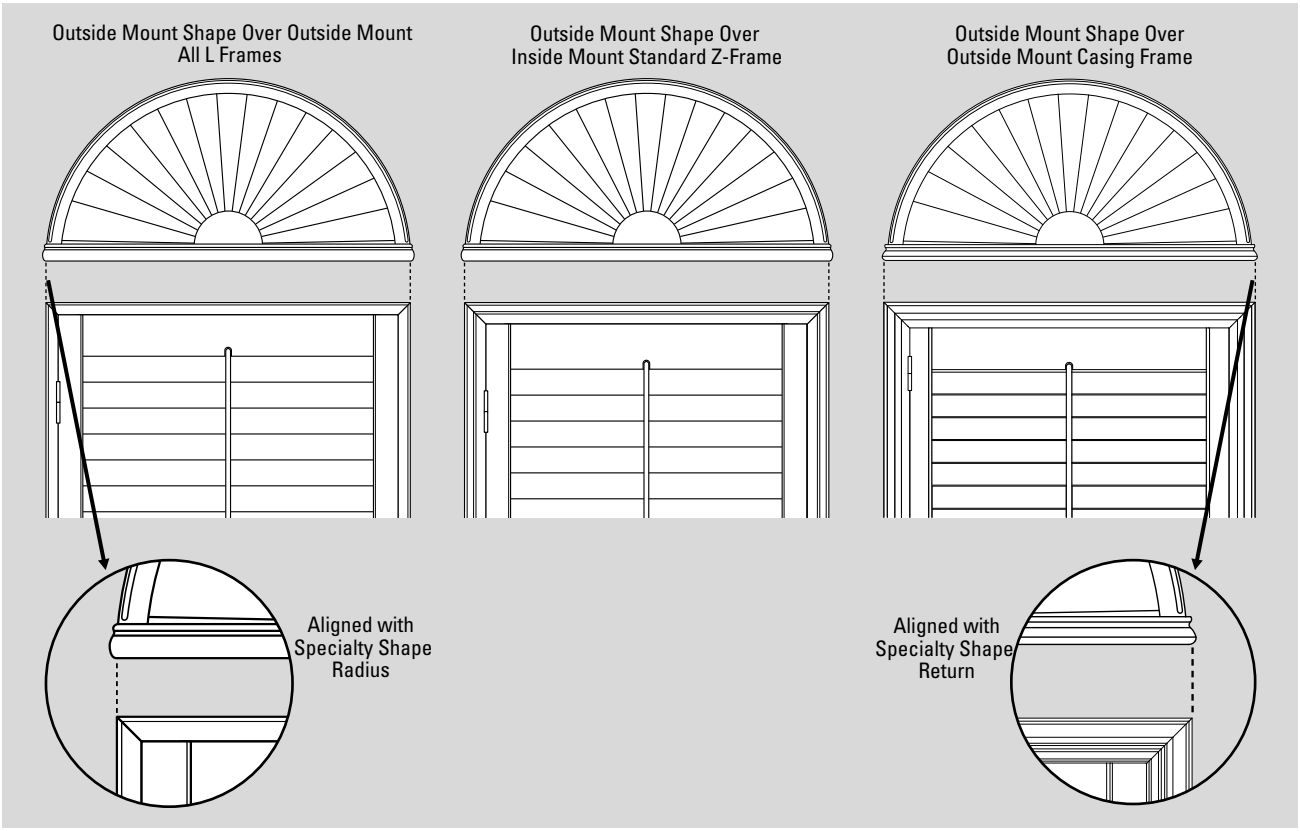
Specialty Shape and Frame Projection
(side view)



Shape and Frame Projection Chart

Frame Type	Projection
Arch Skirt	1 7/16"
1 5/8" Traditional L-Frame (L61K)	1 5/8"
1 3/4" Traditional L-Frame (L68K)	1 3/4"
2 3/8" Traditional L-Frame (L63K)	2 3/8"
2 7/8" Traditional L-Frame (L64K)	2 7/8"
2 3/8" Contemporary L-Frame (L66K)	2 3/8"
2 7/8" Contemporary L-Frame (L67K)	2 7/8"
1 3/4" Contemporary L-Frame (L65K)	1 3/4"
Casing Frame (C61)	1 5/8"
Standard Z-Frame (Z62K)	7/16"
Traditional Z-Frame (Z63K)	5/8"
Contemporary Z-Frame (Z66K)	7/16"
Contemporary Tilt-In Z-Frame (Z67K)	1 1/2"
Traditional Tilt-In Z-Frame (Z68K)	1 1/2"

Outside Mount Specialty Shape Alignment with Standard Panels Below



Continuous Opening

Standard Shutter Mounting

In a continuous opening with an arch top, the arch rests on top of the standard shutter frame.

When specifying any of the Z frames, a Sill Frame, $1\frac{5}{8}$" Traditional L-Frame, $1\frac{3}{4}$" Traditional L-Frame or $1\frac{3}{4}$" Contemporary L-Frame must be used on the top of the framed panel to support the arch. The use of a vertical T-Post for additional support is recommended.

Projection Comparison

The chart on this page compares the projection of the various types of frames with an outside-mounted shape.

The choice of a Sill Frame for the top of the standard shutter's frame minimizes the thickness where the shape's bottom rail and shutter frame meet. Refer to the illustrations to help you visualize this.

Notes

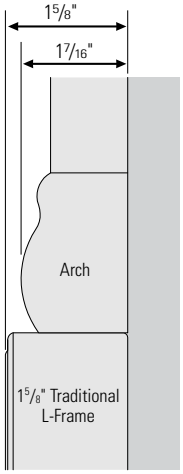
- The Sill Frame cannot be used with the Trim L-Frame or Trim L-Frame + $\frac{1}{2}$".

Arch and Frame Projection Chart

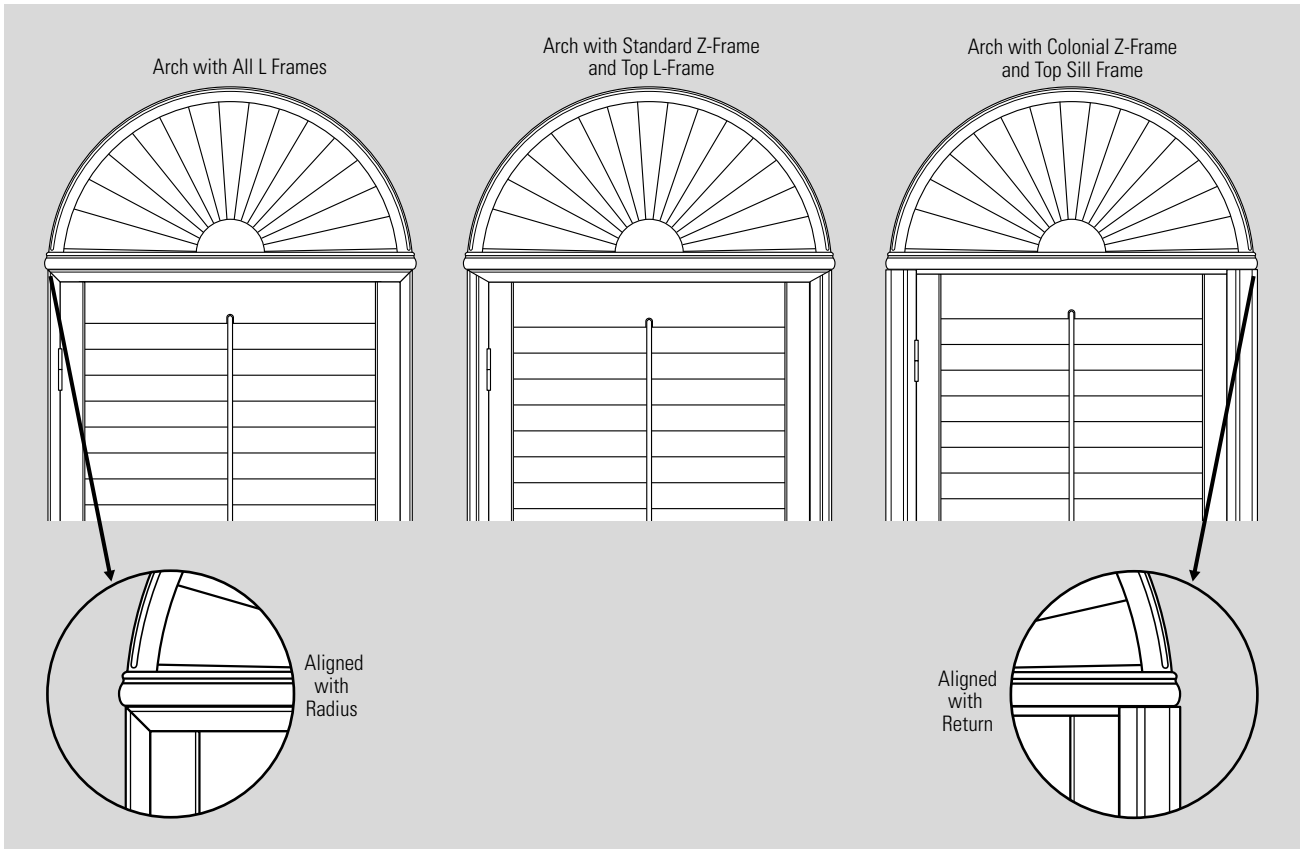
Frame Type	Projection
Arch Skirt	$1\frac{7}{16}$"
$1\frac{5}{8}$" Traditional L-Frame (L61K)	$1\frac{5}{8}$"
$1\frac{3}{4}$" Traditional L-Frame (L68K)	$1\frac{3}{4}$"
$2\frac{3}{8}$" Traditional L-Frame (L63K)	$2\frac{3}{8}$"
$2\frac{7}{8}$" Traditional L-Frame (L64K)	$2\frac{7}{8}$"
$2\frac{3}{8}$" Contemporary L-Frame (L66K)	$2\frac{3}{8}$"
$2\frac{7}{8}$" Contemporary L-Frame (L67K)	$2\frac{7}{8}$"
$1\frac{3}{4}$" Contemporary L-Frame (L65K)	$1\frac{3}{4}$"
Casing Frame (C61)	$1\frac{5}{8}$"
Standard Z-Frame (Z62K)	$\frac{7}{16}$"
Traditional Z-Frame (Z63K)	$\frac{5}{8}$"
Contemporary Z-Frame (Z66K)	$\frac{7}{16}$"
Contemporary Tilt-In Z-Frame (Z67K)	$1\frac{1}{2}$"
Traditional Tilt-In Z-Frame (Z68K)	$1\frac{1}{2}$"

Arch and Frame Projection

(side view; see chart for all frames)



Panel Frame Configuration Options — Front View



Materials

LEVOLOR® PREMIER™ Composite Shutters materials are produced using a proprietary coating process that provides the strength and stability of advanced modern-day materials. At this time, all composite shutters components can only be coated in a straight or linear direction. Since specialties are important to your ability to sell composite shutters throughout a home and cannot be made with standard linear materials, all composite shutters specialties including sunburst arches, arch top and angle top panels, and French door cut-outs, will all be made out of wood and/or poly material and painted or stained to coordinate with the composite shutters finish.High standards have been set for color coordination when this occurs. Slight variation in color, grain pattern and sheen still may exist. All composite shutters specialties should be ordered as a "composite" product and with a "composite" color number. It is important to be aware of the specific instances when wood or other materials will be used so you can educate your customers about the different materials.

The following examples clarify what materials will be used in the construction of your composite shutters specialties.

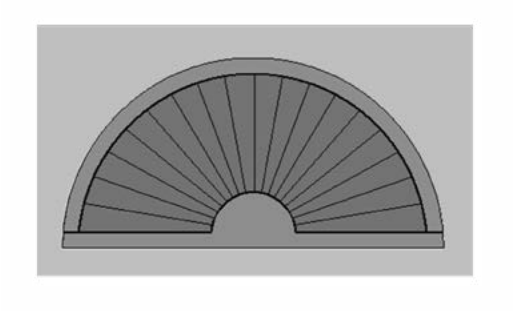
Materials and Finishes:

Hybrid Material: Linear hybrid material with composite shutters finish.
Wood: Solid or engineered wood painted or stained to coordinate with composite shutters solid colors.

Notes

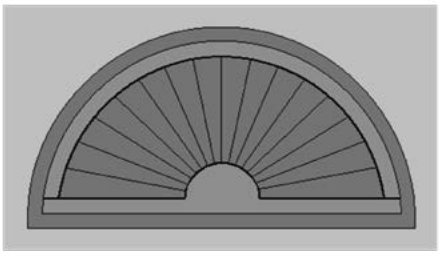
- Some curved frames may be produced with solid poly material, painted to coordinate with composite shutters solid colors.
- For Specialty Shapes, the Casing Frame (C61) is a solid profile with no insert.

Unframed Specialty



- Unframed Specialty: Wood

Framed Specialty



- Framed Specialty: Wood

Unframed Specialty Above Standard Panels



- Unframed Specialty Above: Wood
- Standard Panels Below: Hybrid Material

Framed Specialty Above Standard Panels



- Framed Specialty: Wood
- Standard Panels Below: Hybrid Material

Continuous Framed Specialty Above Standard Panels

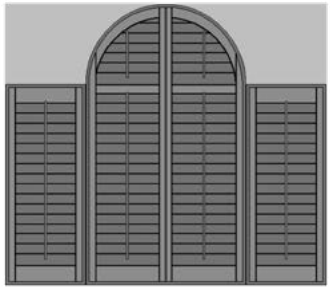


- Framed Specialty: Wood
- Standard Panels Below: Wood

Continuous Openings with Adjoining Side Panels

When the side companion panel frames are adjoining to a unit fabricated in wood, they are then also fabricated in wood.

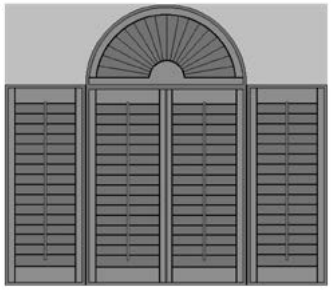
Arch Top Panels with Adjoining Side Panels



- Arch Top Panels: Wood
- Adjoining Side Panels: Wood

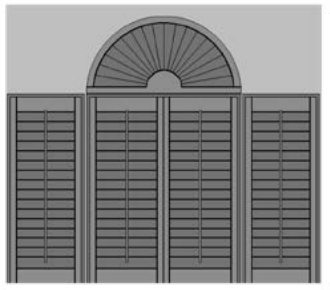
Note:
When ordering standard panels on either side of an Arch/Angle top panel, indicate side-by-side so that the Arch/Angle shutter bottom rail height can be adjusted to align with the side panels.

Framed Continuous Sunburst Above Standard Panels with Adjoining Side Panels



- Framed Sunburst Specialties and Standard Panels: Wood
- Adjoining Side Panels: Wood

Unframed Sunburst Above Standard Panels with Adjoining Side Panels

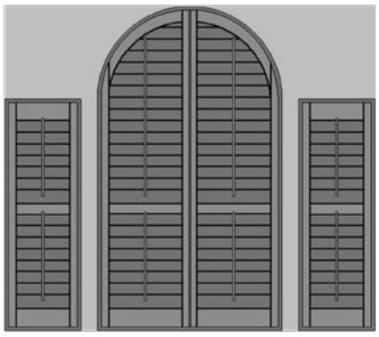


- Unframed Sunburst Specialties: Wood
- Framed Standard Panels: Hybrid Material

Continuous Opening Specialties with Separate Side Panels

When separate side panels are in the configuration with a specialty, the separate side panels are fabricated in hybrid material.

Arch Top Panels with Separate Side Panels



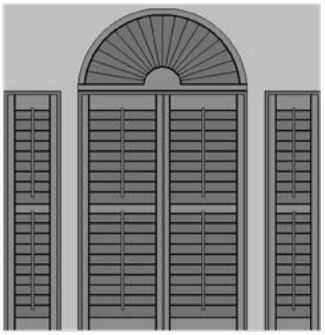
- Arch Top Panels: Wood
- Separate Side Panels: Hybrid Material

Framed Continuous Sunburst Above Standard Panels with Separate Side Panels



- Framed Sunburst Specialty and Standard Panels below: Wood
- Separate Side Panels: Hybrid Material

Unframed Sunburst Above Standard Panels with Separate Side Panels

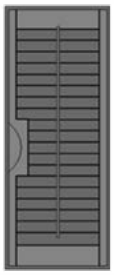


- Unframed Sunburst: Wood
- Standard Panels and Separate Side Panels: Hybrid Material

French Door Cut-Out (FDC) Options

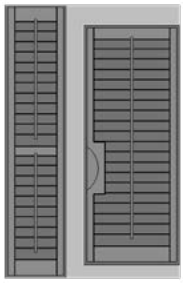
When a French door cut-out is ordered with a side panel of the same height, it should be ordered as a companion.

French Door Cut-Out (FDC)



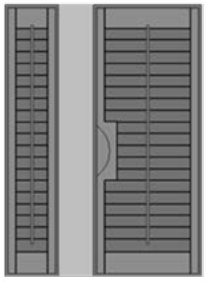
- Wood

FDC with Sidelight Panel (Different Heights)



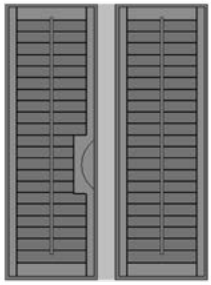
- French Door Cut-Out: Wood
- Sidelight Panel: Hybrid Material

FDC with Companion Sidelight Panel (Same Heights)



- French Door Cut-Out: Wood
- Companion Sidelight Panel: Hybrid Material

FDC with Companion Panel without Cut-Out



- French Door Cut-Out: Wood
- Companion Panel without Cut-Out: Wood

Coordination with Hardwood, Composite, and Poly Shutters

LEVOLOR® PREMIER™ offers three distinctive shutter products for different areas of the home.

- Hardwood Shutters are made of 100% hardwood for a classic look that stands the test of time.
- Composite Shutters offer the blended look of painted and manmade materials in a top quality product.
- Poly Shutters combine the beautiful look of a finely painted shutter with the durability to withstand harsh conditions such as extreme light, moist environments and high traffic areas.

Coordination with Alternative Wood Blinds and Wood Blinds

LEVOLOR PREMIER Alternative Wood Blinds and Wood Blinds offer a variety of applications.

- Alternative Wood Blinds offer the warmth and style of wood blinds, with the advantages of modern engineered materials.
- Wood Blinds feature the finest genuine wood quality, innovative lifting systems and premium upgrades.

Color Coordination Throughout the Home

Coordinating Products makes it easy to coordinate Hardwood, Poly, or Composite Shutters with Alternative Wood Blinds or Wood Blinds. If, for example, a customer wants a Bi-Fold or Bypass shutter to cover a sliding glass door or other wide expanse, but prefers blinds for the windows, you can quickly suggest appropriate coordinating colors. Design versatility is optimized.





Colors listed in chart below are designed as a guide to coordination. They are not an exact match.

Hardwood Shutters	Composite Shutters	Poly Shutters	Alternative Wood Blinds	Wood Blinds
7700 Crystal White		5736 Cotton		450 Meringue
7701 Beluga	6750 Dove White			801 Frost White 427 Cotton Ball
7703 Honest White			3100 Cashmere Crème	
		5751 Ivory		808 Crème
7721 Cloud Cover				221 Heron White
7759 Whisper White		5737 White	971 Igloo	867 Super White
8724 Sparrow				480 Tudor
8744 Nightfall			994 Storm Cloud	
8770 Marigold				870 Autumn
8780 Sedona			945 English Walnut	

Notes

- Always review sample kit color chips when making color coordination decisions.