PRESSGLASS

# DEFLECTION AND SIGHTLINE REFERENCE GUIDE

**1-13/16" Insulating Unit**

*Constructed with a 5/16" glass outboard and plies of 1/4" middle and inboard, all glass heat strengthened (HS)*

| Wind Load | Width (Base) | Height | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 24" | | 36" | | 48" | | 60" | | 72" | | 84" | | 96" | | 108" | | 120" | | 132" | | 144" | | 156" | | 168" | | 180" | | 192" | | 204" | | 216" | | 228" | |
| | | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline | Deflection | Sightline |
| 60 psf | 24" | 0.00" | 1" | 0.00" | 3/4" | 0.02" | 3/4" | 0.03" | 3/4" | 0.04" | 3/4" | 0.04" | 3/4" | 0.04" | 3/4" | 0.04" | 5/8" | 0.04" | 5/8" | 0.04" | 5/8" | 0.05" | 5/8" | 0.05" | 5/8" | 0.05" | 5/8" | 0.05" | 5/8" | 0.05" | 5/8" | 0.12" | 5/8" | 0.13" | 5/8" | 0.15" | 5/8" |
| | 36" | 0.00" | 3/4" | 0.07" | 7/8" | 0.10" | 3/4" | 0.14" | 3/4" | 0.17" | 3/4" | 0.19" | 5/8" | 0.21" | 5/8" | 0.21" | 5/8" | 0.21" | 5/8" | 0.21" | 5/8" | 0.21" | 5/8" | 0.21" | 5/8" | 0.21" | 5/8" | 0.21" | 5/8" | 0.21" | 5/8" | 0.27" | 5/8" | 0.30" | 5/8" | 0.34" | 5/8" |
| | 48" | 0.02" | 3/4" | 0.10" | 3/4" | 0.21" | 3/4" | 0.28" | 3/4" | 0.34" | 3/4" | 0.40" | 3/4" | 0.46" | 3/4" | 0.50" | 3/4" | 0.53" | 3/4" | 0.55" | 3/4" | 0.58" | 3/4" | 0.50" | 3/4" | 0.60" | 3/4" | 0.58" | 3/4" | 0.64" | 3/4" | 0.51" | 3/4" | 0.63" | 3/4" | 0.61" | 3/4" |
| | 60" | 0.03" | 3/4" | 0.14" | 3/4" | 0.28" | 3/4" | 0.40" | 7/8" | 0.49" | 7/8" | 0.59" | 7/8" | 0.68" | 7/8" | 0.77" | 7/8" | 0.84" | 7/8" | 0.90" | 7/8" | 0.87" | 7/8" | 0.99" | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" | *FT req.* | 3/4" | *FT req.* | 3/4" |
| | 72" | 0.04" | 3/4" | 0.17" | 3/4" | 0.34" | 3/4" | 0.49" | 7/8" | 0.62" | 7/8" | 0.74" | 7/8" | 0.86" | 7/8" | 0.98" | 7/8" | 1.06" | 7/8" | 1.19" | 7/8" | 1.31" | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" |
| | 84" | 0.04" | 3/4" | 0.19" | 5/8" | 0.40" | 3/4" | 0.59" | 7/8" | 0.74" | 7/8" | 0.86" | 1" | 1.00" | 1" | 1.13" | 1" | 1.27" | 1" | 1.41" | 1" | 1.55" | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" |
| | 96" | 0.04" | 3/4" | 0.21" | 5/8" | 0.46" | 3/4" | 0.68" | 7/8" | 0.86" | 7/8" | 1.00" | 1" | 1.12" | 1-1/8" | 1.28" | 1-1/8" | 1.43" | 1-1/8" | >1.57" | 1-1/8" | >1.57" | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" |
| | 108" | 0.04" | 5/8" | 0.21" | 5/8" | 0.50" | 3/4" | 0.77" | 7/8" | 0.98" | 7/8" | 1.13" | 1" | 1.28" | 1-1/8" | 1.39" | 1-1/8" | 1.56" | 1-1/8" | >1.57" | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" |
| | 120" | 0.04" | 5/8" | 0.21" | 5/8" | 0.53" | 3/4" | 0.84" | 7/8" | 1.06" | 7/8" | 1.27" | 1" | 1.43" | 1-1/8" | 1.56" | 1-1/8" | >1.57" | 1-1/4" | *FT req.* | 1-1/4" | *FT req.* | 1-1/4" | *FT req.* | 1-1/4" | *FT req.* | 1-1/4" | *FT req.* | 1-1/4" | *FT req.* | 1-1/4" | *FT req.* | 1-1/4" | *FT req.* | 1-1/4" | *FT req.* | 1-1/4" |
| | 132" | 0.04" | 5/8" | 0.21" | 5/8" | *0.55"* | 3/4" | 0.90" | 7/8" | 1.19" | 7/8" | 1.41" | 1" | >1.57" | 1-1/8" | >1.57" | 1-1/8" | *FT req.* | 1-1/4" | *FT req.* | 1-3/8" | *FT req.* | 1-3/8" | *FT req.* | 1-3/8" | *FT req.* | 1-3/8" | *FT req.* | 1-3/8" | *FT req.* | 1-3/8" | *FT req.* | 1-3/8" | *FT req.* | 1-3/8" | *FT req.* | 1-3/8" |
| 50 psf | 24" | 0.00" | 1" | 0.00" | 3/4" | 0.01" | 3/4" | 0.02" | 3/4" | 0.03" | 5/8" | 0.03" | 5/8" | 0.03" | 5/8" | 0.03" | 5/8" | 0.03" | 5/8" | 0.04" | 5/8" | 0.04" | 5/8" | 0.04" | 5/8" | 0.04" | 5/8" | 0.04" | 5/8" | 0.04" | 5/8" | 0.10" | 5/8" | 0.11" | 5/8" | 0.12" | 5/8" |
| | 36" | 0.00" | 3/4" | 0.06" | 3/4" | 0.08" | 3/4" | 0.12" | 5/8" | 0.14" | 5/8" | 0.16" | 5/8" | 0.17" | 5/8" | 0.18" | 5/8" | 0.18" | 5/8" | 0.18" | 5/8" | 0.18" | 5/8" | 0.17" | 5/8" | 0.17" | 5/8" | 0.17" | 5/8" | 0.18" | 5/8" | 0.23" | 5/8" | 0.25" | 5/8" | 0.28" | 5/8" |
| | 48" | 0.01" | 3/4" | 0.08" | 3/4" | 0.18" | 3/4" | 0.24" | 3/4" | 0.30" | 5/8" | 0.35" | 5/8" | 0.40" | 5/8" | 0.43" | 5/8" | 0.46" | 5/8" | 0.48" | 5/8" | 0.50" | 5/8" | 0.51" | 5/8" | 0.52" | 5/8" | 0.54" | 5/8" | 0.54" | 5/8" | 0.55" | 5/8" | 0.50" | 5/8" | 0.54" | 5/8" |
| | 60" | 0.02" | 3/4" | 0.12" | 5/8" | 0.24" | 3/4" | 0.35" | 3/4" | 0.44" | 3/4" | 0.53" | 3/4" | 0.61" | 3/4" | 0.68" | 3/4" | 0.75" | 3/4" | 0.75" | 3/4" | 0.85" | 3/4" | 0.85" | 3/4" | 0.95" | 3/4" | 1.02" | 3/4" | 0.97" | 3/4" | 1.03" | 3/4" | *FT req.* | 3/4" | *FT req.* | 3/4" |
| | 72" | 0.03" | 5/8" | 0.14" | 5/8" | 0.30" | 5/8" | 0.44" | 3/4" | 0.55" | 7/8" | 0.67" | 7/8" | 0.78" | 7/8" | 0.88" | 7/8" | 0.99" | 3/4" | 1.06" | 3/4" | 1.18" | 3/4" | 1.23" | 3/4" | 1.24" | 3/4" | *FT req.* | 3/4" | *FT req.* | 3/4" | *FT req.* | 3/4" | *FT req.* | 3/4" | *FT req.* | 3/4" |
| | 84" | 0.03" | 5/8" | 0.16" | 5/8" | 0.35" | 5/8" | 0.53" | 3/4" | 0.67" | 7/8" | 0.78" | 7/8" | 0.91" | 7/8" | 1.04" | 7/8" | 1.17" | 7/8" | 1.29" | 7/8" | 1.41" | 7/8" | 1.53" | 7/8" | >1.57" | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" |
| | 96" | 0.03" | 5/8" | 0.17" | 5/8" | 0.40" | 5/8" | 0.61" | 3/4" | 0.78" | 7/8" | 0.91" | 7/8" | 1.02" | 1" | 1.17" | 1" | 1.32" | 1" | 1.45" | 1" | >1.57" | 1" | >1.57" | 1" | >1.57" | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" |
| | 108" | 0.03" | 5/8" | 0.18" | 5/8" | 0.43" | 5/8" | 0.68" | 3/4" | 0.88" | 7/8" | 1.04" | 7/8" | 1.17" | 1" | 1.28" | 1" | 1.45" | 1" | >1.57" | 1" | >1.57" | 1" | >1.57" | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" |
| | 120" | 0.03" | 5/8" | 0.18" | 5/8" | 0.46" | 5/8" | 0.75" | 3/4" | 0.99" | 3/4" | 1.17" | 7/8" | 1.32" | 1" | 1.45" | 1" | 1.54" | 1-1/8" | >1.57" | 1-1/8" | >1.57" | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" |
| | 132" | 0.04" | 5/8" | 0.18" | 5/8" | 0.48" | 5/8" | 0.75" | 3/4" | 1.06" | 3/4" | 1.29" | 7/8" | 1.45" | 1" | >1.57" | 1" | >1.57" | 1-1/8" | >1.57" | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" | *FT req.* | 1-1/8" |
| 40 psf | 24" | 0.00" | 7/8" | 0.00" | 3/4" | 0.00" | 5/8" | 0.02" | 5/8" | 0.02" | 5/8" | 0.03" | 5/8" | 0.03" | 5/8" | 0.03" | 5/8" | 0.03" | 5/8" | 0.03" | 5/8" | 0.03" | 5/8" | 0.03" | 5/8" | 0.03" | 5/8" | 0.03" | 5/8" | 0.03" | 5/8" | 0.08" | 5/8" | 0.09" | 5/8" | 0.10" | 5/8" |
| | 36" | 0.00" | 3/4" | 0.04" | 3/4" | 0.06" | 5/8" | 0.09" | 5/8" | 0.11" | 5/8" | 0.13" | 5/8" | 0.14" | 5/8" | 0.14" | 5/8" | 0.14" | 5/8" | 0.14" | 5/8" | 0.14" | 5/8" | 0.14" | 1/2" | 0.14" | 1/2" | 0.14" | 1/2" | 0.14" | 1/2" | 0.18" | 1/2" | 0.20" | 1/2" | 0.23" | 1/2" |
| | 48" | 0.00" | 5/8" | 0.06" | 5/8" | 0.15" | 5/8" | 0.20" | 5/8" | 0.25" | 5/8" | 0.29" | 5/8" | 0.33" | 5/8" | 0.36" | 5/8" | 0.39" | 5/8" | 0.40" | 5/8" | 0.42" | 5/8" | 0.42" | 5/8" | 0.43" | 5/8" | 0.43" | 5/8" | 0.44" | 5/8" | 0.43" | 5/8" | 0.40" | 5/8" | 0.45" | 5/8" |
| | 60" | 0.02" | 5/8" | 0.09" | 5/8" | 0.20" | 5/8" | 0.30" | 5/8" | 0.38" | 5/8" | 0.45" | 5/8" | 0.52" | 5/8" | 0.59" | 5/8" | 0.65" | 5/8" | 0.70" | 5/8" | 0.74" | 5/8" | 0.71" | 5/8" | 0.80" | 5/8" | 0.86" | 5/8" | 0.79" | 5/8" | 0.85" | 5/8" | 0.97" | 5/8" | 1.01" | 5/8" |
| | 72" | 0.02" | 5/8" | 0.11" | 5/8" | 0.25" | 5/8" | 0.38" | 5/8" | 0.48" | 3/4" | 0.58" | 3/4" | 0.68" | 3/4" | 0.78" | 3/4" | 0.87" | 3/4" | 0.95" | 3/4" | 1.03" | 3/4" | 1.05" | 3/4" | 1.04" | 3/4" | 1.19" | 3/4" | 1.25" | 3/4" | 1.49" | 3/4" | >1.57" | 3/4" | *FT req.* | 3/4" |
| | 84" | 0.03" | 5/8" | 0.13" | 5/8" | 0.29" | 5/8" | 0.45" | 5/8" | 0.58" | 3/4" | 0.69" | 3/4" | 0.81" | 3/4" | 0.93" | 3/4" | 1.04" | 3/4" | 1.15" | 3/4" | 1.26" | 3/4" | 1.36" | 3/4" | 1.47" | 3/4" | 1.47" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" | *FT req.* | 3/4" | *FT req.* | 3/4" |
| | 96" | 0.03" | 5/8" | 0.14" | 5/8" | 0.33" | 5/8" | 0.52" | 5/8" | 0.68" | 3/4" | 0.81" | 3/4" | 0.92" | 7/8" | 1.05" | 7/8" | 1.18" | 7/8" | 1.31" | 7/8" | 1.44" | 7/8" | 1.57" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" |
| | 108" | 0.03" | 5/8" | 0.14" | 5/8" | 0.36" | 5/8" | 0.59" | 5/8" | 0.78" | 3/4" | 0.93" | 3/4" | 1.05" | 7/8" | 1.15" | 7/8" | 1.30" | 7/8" | 1.44" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | *FT req.* | 7/8" | *FT req.* | 7/8" |
| | 120" | 0.03" | 5/8" | 0.14" | 5/8" | 0.39" | 5/8" | 0.65" | 5/8" | 0.87" | 3/4" | 1.04" | 3/4" | 1.18" | 7/8" | 1.30" | 7/8" | 1.40" | 1" | 1.55" | 1" | >1.57" | 1" | >1.57" | 1" | >1.57" | 1" | >1.57" | 1" | >1.57" | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" |
| | 132" | 0.03" | 5/8" | 0.14" | 5/8" | 0.40" | 5/8" | 0.70" | 5/8" | 0.95" | 3/4" | 1.15" | 3/4" | 1.31" | 7/8" | 1.44" | 7/8" | 1.55" | 1" | >1.57" | 1" | >1.57" | 1" | >1.57" | 1" | >1.57" | 1" | >1.57" | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" | *FT req.* | 1" |
| 30 psf | 24" | 0.00" | 7/8" | 0.00" | 3/4" | 0.00" | 5/8" | 0.01" | 5/8" | 0.02" | 5/8" | 0.02" | 5/8" | 0.02" | 5/8" | 0.02" | 5/8" | 0.02" | 5/8" | 0.02" | 5/8" | 0.02" | 5/8" | 0.02" | 5/8" | 0.02" | 5/8" | 0.02" | 5/8" | 0.02" | 5/8" | 0.06" | 1/2" | 0.07" | 1/2" | 0.07" | 1/2" |
| | 36" | 0.00" | 3/4" | 0.00" | 5/8" | 0.04" | 5/8" | 0.06" | 1/2" | 0.08" | 1/2" | 0.09" | 1/2" | 0.10" | 1/2" | 0.11" | 1/2" | 0.11" | 1/2" | 0.11" | 1/2" | 0.11" | 1/2" | 0.10" | 1/2" | 0.10" | 1/2" | 0.10" | 1/2" | 0.11" | 1/2" | 0.13" | 1/2" | 0.15" | 1/2" | 0.17" | 1/2" |
| | 48" | 0.00" | 5/8" | 0.04" | 5/8" | 0.11" | 5/8" | 0.15" | 5/8" | 0.19" | 1/2" | 0.23" | 1/2" | 0.26" | 1/2" | 0.28" | 1/2" | 0.30" | 1/2" | 0.32" | 1/2" | 0.32" | 1/2" | 0.33" | 1/2" | 0.33" | 1/2" | 0.33" | 1/2" | 0.33" | 1/2" | 0.33" | 1/2" | 0.31" | 1/2" | 0.34" | 1/2" |
| | 60" | 0.01" | 5/8" | 0.06" | 1/2" | 0.15" | 5/8" | 0.24" | 5/8" | 0.31" | 5/8" | 0.37" | 5/8" | 0.43" | 5/8" | 0.48" | 5/8" | 0.53" | 5/8" | 0.57" | 5/8" | 0.60" | 5/8" | 0.64" | 1/2" | 0.66" | 1/2" | 0.69" | 1/2" | 0.71" | 1/2" | 0.60" | 1/2" | 0.77" | 1/2" | 0.77" | 1/2" |
| | 72" | 0.02" | 5/8" | 0.08" | 1/2" | 0.19" | 1/2" | 0.31" | 5/8" | 0.41" | 5/8" | 0.49" | 5/8" | 0.57" | 5/8" | 0.65" | 5/8" | 0.73" | 5/8" | 0.80" | 5/8" | 0.86" | 5/8" | 0.93" | 5/8" | 0.99" | 5/8" | 1.04" | 5/8" | 1.02" | 5/8" | 1.22" | 5/8" | 1.31" | 5/8" | 1.30" | 5/8" |
| | 84" | 0.02" | 5/8" | 0.09" | 1/2" | 0.23" | 1/2" | 0.37" | 5/8" | 0.49" | 5/8" | 0.59" | 5/8" | 0.69" | 5/8" | 0.79" | 5/8" | 0.89" | 5/8" | 0.98" | 5/8" | 1.08" | 5/8" | 1.17" | 5/8" | 1.26" | 5/8" | 1.34" | 5/8" | 1.40" | 5/8" | 1.43" | 5/8" | >1.57" | 5/8" | >1.57" | 5/8" |
| | 96" | 0.02" | 5/8" | 0.10" | 1/2" | 0.26" | 1/2" | 0.43" | 5/8" | 0.57" | 5/8" | 0.69" | 5/8" | 0.79" | 3/4" | 0.91" | 3/4" | 1.02" | 3/4" | 1.14" | 3/4" | 1.25" | 3/4" | 1.36" | 3/4" | 1.47" | 3/4" | 1.58" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" |
| | 108" | 0.02" | 5/8" | 0.11" | 1/2" | 0.28" | 1/2" | 0.48" | 5/8" | 0.65" | 5/8" | 0.79" | 5/8" | 0.91" | 3/4" | 1.01" | 3/4" | 1.13" | 3/4" | 1.26" | 3/4" | 1.38" | 3/4" | 1.51" | 3/4" | 1.64" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" |
| | 120" | 0.02" | 5/8" | 0.11" | 1/2" | 0.30" | 1/2" | 0.53" | 5/8" | 0.73" | 5/8" | 0.89" | 5/8" | 1.02" | 3/4" | 1.13" | 3/4" | 1.23" | 3/4" | 1.37" | 3/4" | 1.50" | 3/4" | 1.64" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" | >1.57" | 3/4" |
| | 132" | 0.02" | 5/8" | 0.11" | 1/2" | 0.32" | 1/2" | 0.57" | 5/8" | 0.80" | 5/8" | 0.98" | 5/8" | 1.14" | 3/4" | 1.26" | 3/4" | 1.37" | 3/4" | 1.46" | 7/8" | 1.60" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" | >1.57" | 7/8" |

*Values are for vertically installed glass. Deflection is center of glass based on ASTM E1300 and is calculated using Window Glass Design (WGD5) and Advanced Window Glass Design (v3.0.1.0). Sightline is for structurally glazed units based on ASTM C1249. When conventionally glazed, the minimum sightline is 1/2".*