



V450 | HomeMaker Series

| Glass Package | IG Thick | Interior Glass | Spacer | Exterior Glass | Gas Fill | 5/17/2021 | | No Grids | | | Energy Star |
|--|----------|----------------|--------------|----------------|----------|---------------|------|----------|------|------|--------------|
| | | | | | | Sound Control | STC | U-Value | SHGC | VLTT | |
| HM160 Horizontal Slider | | | | | | | | | | | |
| DSB Glass with 270 Low-E "Standard" | 3/4" | 1/8" | Intercept | 1/8" | Air | 28 | 0.32 | 0.30 | 0.55 | | |
| DSB Glass with 270 Low-E and Argon | 3/4" | 1/8" | Intercept | 1/8" | Argon | 28 | 0.28 | 0.29 | 0.55 | | NC |
| DSB Glass with 366 Low-E | 3/4" | 1/8" | Intercept | 1/8" | Air | 28 | 0.31 | 0.22 | 0.51 | | S |
| DSB Glass with 366 Low-E and Argon | 3/4" | 1/8" | Intercept | 1/8" | Argon | 28 | 0.28 | 0.22 | 0.51 | | NC, SC, S |
| DSB Glass with 340 Low-E | 3/4" | 1/8" | Intercept | 1/8" | Air | 28 | 0.32 | 0.15 | 0.31 | | S |
| DSB Glass with 340 Low-E and Argon | 3/4" | 1/8" | Intercept | 1/8" | Argon | 28 | 0.28 | 0.14 | 0.31 | | NC, SC, S |
| DSB Glass with 366 Low-E, i89, and Argon | 3/4" | 1/8" | Super Spacer | 1/8" | Argon | 30 | 0.23 | 0.21 | 0.50 | | N, NC, SC, S |
| DSB Glass with 366 Low-E "CA-T24" | 3/4" | 1/8" | Super Spacer | 1/8" | Air | 30 | 0.30 | 0.22 | 0.51 | | NC, SC, S |
| DSB Glass with 366 Low-E and Argon "TMAX" | 3/4" | 1/8" | Super Spacer | 1/8" | Argon | 30 | 0.27 | 0.22 | 0.51 | | N, NC, SC, S |
| DSB Glass with 270 Low-E and Argon "Energy Star North" | 3/4" | 1/8" | Super Spacer | 1/8" | Argon | 30 | 0.27 | 0.29 | 0.55 | | N, NC |
| 3/16"DSB Glass with 270 Low-E | 1 1/8" | 1/8" | Super Spacer | 3/16" | Air | 35 | 0.32 | 0.29 | 0.54 | | |
| 3/16"DSB Glass with 366 Low-E | 1 1/8" | 1/8" | Super Spacer | 3/16" | Air | 35 | 0.31 | 0.22 | 0.51 | | S |
| 3/16"DSB Glass with 340 Low-E | 1 1/8" | 1/8" | Super Spacer | 3/16" | Air | 35 | 0.32 | 0.15 | 0.30 | | S |
| 1/4"DSB Glass with 270 Low-E | 1 1/8" | 1/8" | SS Box | 1/4" | Air | 36 | 0.33 | 0.29 | 0.54 | | |
| 1/4"DSB Glass with 366 Low-E | 1 1/8" | 1/8" | SS Box | 1/4" | Air | 36 | 0.32 | 0.22 | 0.50 | | S |
| 1/4"DSB Glass with 340 Low-E | 1 1/8" | 1/8" | SS Box | 1/4" | Air | 36 | 0.33 | 0.15 | 0.30 | | S |
| 1/4"2.7 Lami Glass with 270 Low-E | 1 1/8" | 2.7[030PVB]2.7 | SS Box | 1/4" | Air | 39 | 0.32 | 0.28 | 0.53 | | |
| 1/4"2.7 Lami Glass with 366 Low-E | 1 1/8" | 2.7[030PVB]2.7 | SS Box | 1/4" | Air | 39 | 0.32 | 0.22 | 0.50 | | S |
| 1/4"2.7 Lami Glass with 340 Low-E | 1 1/8" | 2.7[030PVB]2.7 | SS Box | 1/4" | Air | 39 | 0.32 | 0.15 | 0.30 | | S |
| HM150 Single Hung | | | | | | | | | | | |
| DSB Glass with 270 Low-E "Standard" | 3/4" | 1/8" | Intercept | 1/8" | Air | 28 | 0.32 | 0.30 | 0.55 | | |
| DSB Glass with 270 Low-E and Argon | 3/4" | 1/8" | Intercept | 1/8" | Argon | 28 | 0.28 | 0.29 | 0.55 | | NC |
| DSB Glass with 366 Low-E | 3/4" | 1/8" | Intercept | 1/8" | Air | 28 | 0.31 | 0.22 | 0.51 | | S |
| DSB Glass with 366 Low-E and Argon | 3/4" | 1/8" | Intercept | 1/8" | Argon | 28 | 0.28 | 0.22 | 0.51 | | NC, SC, S |
| DSB Glass with 340 Low-E | 3/4" | 1/8" | Intercept | 1/8" | Air | 28 | 0.32 | 0.15 | 0.31 | | S |
| DSB Glass with 340 Low-E and Argon | 3/4" | 1/8" | Intercept | 1/8" | Argon | 28 | 0.28 | 0.14 | 0.31 | | NC, SC, S |
| DSB Glass with 366 Low-E, i89, and Argon | 3/4" | 1/8" | Super Spacer | 1/8" | Argon | 30 | 0.23 | 0.21 | 0.50 | | N, NC, SC, S |
| DSB Glass with 366 Low-E "CA-T24" | 3/4" | 1/8" | Super Spacer | 1/8" | Air | 30 | 0.30 | 0.22 | 0.51 | | NC, SC, S |
| DSB Glass with 366 Low-E and Argon "TMAX" | 3/4" | 1/8" | Super Spacer | 1/8" | Argon | 30 | 0.27 | 0.22 | 0.51 | | N, NC, SC, S |
| DSB Glass with 270 Low-E and Argon "Energy Star North" | 3/4" | 1/8" | Super Spacer | 1/8" | Argon | 30 | 0.27 | 0.29 | 0.55 | | N, NC, SC, S |
| 3/16"DSB Glass with 270 Low-E | 1 1/8" | 1/8" | Super Spacer | 3/16" | Air | 35 | 0.32 | 0.29 | 0.54 | | |
| 3/16"DSB Glass with 366 Low-E | 1 1/8" | 1/8" | Super Spacer | 3/16" | Air | 35 | 0.31 | 0.22 | 0.51 | | S |
| 3/16"DSB Glass with 340 Low-E | 1 1/8" | 1/8" | Super Spacer | 3/16" | Air | 35 | 0.32 | 0.15 | 0.30 | | S |
| 1/4"DSB Glass with 270 Low-E | 1 1/8" | 1/8" | SS Box | 1/4" | Air | 37 | 0.33 | 0.29 | 0.54 | | |
| 1/4"DSB Glass with 366 Low-E | 1 1/8" | 1/8" | SS Box | 1/4" | Air | 37 | 0.32 | 0.22 | 0.50 | | S |
| 1/4"DSB Glass with 340 Low-E | 1 1/8" | 1/8" | SS Box | 1/4" | Air | 37 | 0.33 | 0.15 | 0.30 | | S |
| 1/4"2.7 Lami Glass with 270 Low-E | 1 1/8" | 2.7[030PVB]2.7 | SS Box | 1/4" | Air | 40 | 0.32 | 0.28 | 0.53 | | |
| 1/4"2.7 Lami Glass with 366 Low-E | 1 1/8" | 2.7[030PVB]2.7 | SS Box | 1/4" | Air | 40 | 0.32 | 0.22 | 0.50 | | S |
| 1/4"2.7 Lami Glass with 340 Low-E | 1 1/8" | 2.7[030PVB]2.7 | SS Box | 1/4" | Air | 40 | 0.32 | 0.15 | 0.30 | | S |
| HM155 Fixed Picture Window | | | | | | | | | | | |
| DSB Glass with 270 Low-E "Standard" | 3/4" | 1/8" | Intercept | 1/8" | Air | 29 | 0.30 | 0.32 | 0.59 | | NC |
| DSB Glass with 270 Low-E and Argon | 3/4" | 1/8" | Intercept | 1/8" | Argon | 29 | 0.27 | 0.31 | 0.59 | | N, NC |
| DSB Glass with 366 Low-E | 3/4" | 1/8" | Intercept | 1/8" | Air | 29 | 0.30 | 0.24 | 0.55 | | NC, SC, S |
| DSB Glass with 366 Low-E and Argon | 3/4" | 1/8" | Intercept | 1/8" | Argon | 29 | 0.26 | 0.23 | 0.55 | | N, NC, SC, S |
| DSB Glass with 340 Low-E | 3/4" | 1/8" | Intercept | 1/8" | Air | 29 | 0.30 | 0.16 | 0.33 | | NC, SC, S |
| DSB Glass with 340 Low-E and Argon | 3/4" | 1/8" | Intercept | 1/8" | Argon | 29 | 0.26 | 0.15 | 0.33 | | N, NC, SC, S |
| DSB Glass with 366 Low-E, i89, and Argon | 3/4" | 1/8" | Super Spacer | 1/8" | Argon | 29 | 0.21 | 0.23 | 0.53 | | N, NC, SC, S |
| DSB Glass with 366 Low-E "CA-T24" | 3/4" | 1/8" | Super Spacer | 1/8" | Air | 29 | 0.29 | 0.24 | 0.55 | | NC, SC, S |
| DSB Glass with 366 Low-E and Argon "TMAX" | 3/4" | 1/8" | Super Spacer | 1/8" | Argon | 29 | 0.25 | 0.23 | 0.55 | | N, NC, SC, S |
| DSB Glass with 270 Low-E and Argon "Energy Star North" | 3/4" | 1/8" | Super Spacer | 1/8" | Argon | 29 | 0.26 | 0.31 | 0.59 | | N, NC |
| 3/16"DSB Glass with 270 Low-E | 1 1/8" | 1/8" | Super Spacer | 3/16" | Air | 33 | 0.31 | 0.31 | 0.59 | | |
| 3/16"DSB Glass with 366 Low-E | 1 1/8" | 1/8" | Super Spacer | 3/16" | Air | 33 | 0.31 | 0.24 | 0.54 | | S |
| 3/16"DSB Glass with 340 Low-E | 1 1/8" | 1/8" | Super Spacer | 3/16" | Air | 33 | 0.31 | 0.16 | 0.33 | | S |
| 1/4"DSB Glass with 270 Low-E | 1 1/8" | 1/8" | SS Box | 1/4" | Air | 36 | 0.31 | 0.31 | 0.58 | | |
| 1/4"DSB Glass with 366 Low-E | 1 1/8" | 1/8" | SS Box | 1/4" | Air | 36 | 0.31 | 0.24 | 0.54 | | S |
| 1/4"DSB Glass with 340 Low-E | 1 1/8" | 1/8" | SS Box | 1/4" | Air | 36 | 0.31 | 0.16 | 0.32 | | S |
| 1/4"2.7 Lami Glass with 270 Low-E | 1 1/8" | 2.7[030PVB]2.7 | SS Box | 1/4" | Air | 42 | 0.31 | 0.31 | 0.58 | | |
| 1/4"2.7 Lami Glass with 366 Low-E | 1 1/8" | 2.7[030PVB]2.7 | SS Box | 1/4" | Air | 42 | 0.30 | 0.23 | 0.53 | | NC, SC, S |
| 1/4"2.7 Lami Glass with 340 Low-E | 1 1/8" | 2.7[030PVB]2.7 | SS Box | 1/4" | Air | 42 | 0.30 | 0.16 | 0.32 | | NC, SC, S |



V450 | HomeMaker Series

| Glass Package | OA Thickness of Ins. Glass Unit | Interior Glass | Spacer | Exterior Glass | Argon or Capillary Tube | STC | No Grids | | |
|-------------------------------------|---------------------------------|----------------|-------------|----------------------------|-------------------------|-----|----------|------|------|
| | | | | | | | U-VALUE | SHGC | VLT |
| April 26, 2017 | | | | | | | | | |
| HM-147 Casement | | | | | | | | | |
| Standard | 3/4" | DSB Clear | Intercept | DSB LoE ² 270 | Cap Tube | 30 | 0.30 | 0.24 | 0.44 |
| LoE ³ -366 | 3/4" | DSB Clear | Intercept | DSB LoE ³ -366 | Cap Tube | 30 | 0.29 | 0.18 | 0.41 |
| LoE ³ -340 | 3/4" | DSB Clear | Intercept | DSB LoE ³ -340 | Cap Tube | 30 | 0.29 | 0.12 | 0.25 |
| LoE ³ -340 + Argon | 3/4" | DSB Clear | Intercept | DSB LoE ³ -340 | Argon | 30 | 0.27 | 0.12 | 0.25 |
| CA-T24 | 3/4" | DSB Clear | SuperSpacer | DSB LoE ³ -366 | Cap Tube | 30 | 0.28 | 0.18 | 0.41 |
| ENERGY STAR NORTH | 3/4" | DSB Clear | SuperSpacer | DSB LoE ² 270 | Argon | 30 | 0.25 | 0.24 | 0.44 |
| TMAX ALL Zones | 3/4" | DSB Clear | SuperSpacer | DSB LoE ³ -366 | Argon | 30 | 0.25 | 0.18 | 0.41 |
| i89 + Argon | 3/4" | DSB i89 | SuperSpacer | DSB LoE ³ -366 | Argon | 30 | 0.22 | 0.18 | 0.40 |
| SQS Lami / Low E | 3/4" | LAMI | SuperSpacer | DSB LoE ² 270 | Cap Tube | 34 | 0.31 | 0.24 | 0.44 |
| SQS Lami / LoE ³ -366 | 3/4" | LAMI | SuperSpacer | DSB LoE ³ -366 | Cap Tube | 34 | 0.31 | 0.18 | 0.40 |
| STC Annealed Low E | 1 1/8" | 3/16" | SuperSpacer | DSB LoE ² 270 | Cap Tube | 34 | 0.29 | 0.24 | 0.44 |
| STC Annealed LoE ³ -366 | 1 1/8" | 3/16" | SuperSpacer | DSB LoE ³ -366 | Cap Tube | 34 | 0.29 | 0.18 | 0.41 |
| i89 | 1-1/8" | 3/16" i89 | SuperSpacer | DSB LoE ³ -366 | Argon | 34 | 0.22 | 0.17 | 0.40 |
| i89 | 1-1/8" | 3/16" i89 | SuperSpacer | 3/16 LoE ³ -366 | Argon | N/A | 0.22 | 0.17 | 0.39 |
| STC Laminated/Low E | 1 1/8" | SQ41 1/4" Lami | SuperSpacer | 3/16 LoE ² -270 | Cap Tube | 37 | 0.28 | 0.23 | 0.43 |
| STC Laminated/LoE ³ -366 | 1 1/8" | SQ41 1/4" Lami | SuperSpacer | 3/16 LoE ³ -366 | Cap Tube | 37 | 0.28 | 0.18 | 0.40 |
| HM-140 Awning | | | | | | | | | |
| Standard | 3/4" | DSB Clear | Intercept | DSB LoE ² 270 | Cap Tube | N/A | 0.30 | 0.24 | 0.44 |
| LoE ³ -366 | 3/4" | DSB Clear | Intercept | DSB LoE ³ -366 | Cap Tube | N/A | 0.30 | 0.18 | 0.41 |
| LoE ³ -340 | 3/4" | DSB Clear | Intercept | DSB LoE ³ -340 | Cap Tube | N/A | 0.30 | 0.12 | 0.25 |
| LoE ³ -340 + Argon | 3/4" | DSB Clear | Intercept | DSB LoE ³ -340 | Argon | N/A | 0.27 | 0.12 | 0.25 |
| CA-T24 | 3/4" | DSB Clear | SuperSpacer | DSB LoE ³ -366 | Cap Tube | 29 | 0.28 | 0.18 | 0.41 |
| ENERGY STAR NORTH | 3/4" | DSB Clear | SuperSpacer | DSB LoE ² 270 | Argon | 29 | 0.26 | 0.24 | 0.44 |
| TMAX ALL Zones | 3/4" | DSB Clear | SuperSpacer | DSB LoE ³ -366 | Argon | 29 | 0.25 | 0.18 | 0.41 |
| i89 + Argon | 3/4" | DSB i89 | SuperSpacer | DSB LoE ³ -366 | Argon | 29 | 0.23 | 0.18 | 0.40 |
| SQS Lami / Low E | 3/4" | LAMI | SuperSpacer | DSB LoE ² 270 | Cap Tube | 35 | 0.31 | 0.24 | 0.44 |
| SQS Lami / LoE ³ -366 | 3/4" | LAMI | SuperSpacer | DSB LoE ³ -366 | Cap Tube | 35 | 0.31 | 0.18 | 0.40 |
| STC Annealed Low E | 1 1/8" | 3/16" | SuperSpacer | DSB LoE ² 270 | Cap Tube | 35 | 0.29 | 0.24 | 0.44 |
| STC Annealed LoE ³ -366 | 1 1/8" | 3/16" | SuperSpacer | DSB LoE ³ -366 | Cap Tube | 35 | 0.29 | 0.18 | 0.41 |
| i89 | 1-1/8" | 3/16" i89 | SuperSpacer | DSB LoE ³ -366 | Argon | 35 | 0.23 | 0.17 | 0.40 |
| i89 | 1-1/8" | 3/16" i89 | SuperSpacer | 3/16 LoE ³ -366 | Argon | N/A | 0.23 | 0.17 | 0.39 |
| STC Laminated/Low E | 1 1/8" | SQ41 1/4" Lami | SuperSpacer | 3/16 LoE ² -270 | Cap Tube | 38 | 0.29 | 0.23 | 0.43 |
| STC Laminated/LoE ³ -366 | 1 1/8" | SQ41 1/4" Lami | SuperSpacer | 3/16 LoE ³ -366 | Cap Tube | 38 | 0.29 | 0.18 | 0.40 |

| Glass Package | IG Thick | Interior Glass | Spacer | Exterior Glass | Gas Fill | 5/18/21 | Sound Control (STC) | No Grids | | | Energy Star |
|--|----------|----------------|--------------|----------------|----------|---------|---------------------|----------|------|------|--------------|
| | | | | | | | | U-Value | SHGC | VLT | |
| EC 192T Multi-Slide (Thermal Frame) | | | | | | | | | | | |
| DSB Glass with 366 Low-E | 7/8" | 1/8" | Ultra | 1/8" | Air | | n/a | 0.42 | 0.21 | 0.46 | |
| DSB Glass with 366 Low-E and Argon | 7/8" | 1/8" | Ultra | 1/8" | Argon | | n/a | 0.39 | 0.20 | 0.46 | |
| 3/16" Glass with 366 Low-E | 7/8" | 3/16" | Ultra | 3/16" | Air | | n/a | 0.42 | 0.21 | 0.45 | |
| 3/16" Glass with 366 Low-E and Argon | 7/8" | 3/16" | Ultra | 3/16" | Argon | | n/a | 0.39 | 0.20 | 0.45 | |
| 3/16" Glass with 340 Low-E | 7/8" | 3/16" | Ultra | 3/16" | Air | | n/a | 0.42 | 0.14 | 0.27 | |
| 3/16" Glass with 340 Low-E and Argon | 7/8" | 3/16" | Ultra | 3/16" | Argon | | n/a | 0.39 | 0.14 | 0.27 | |
| HM 290 | | | | | | | | | | | |
| 5/32" Glass with 366 Low-E | 13/16" | 5/32" | Intercept | 5/32" | Air | | n/a | 0.31 | 0.21 | 0.48 | |
| 5/32" Glass with 340 Low-E | 13/16" | 5/32" | Intercept | 5/32" | Air | | n/a | 0.31 | 0.14 | 0.29 | |
| 5/32" Glass with 366 Low-E and Argon "TMAX ALL ZONE" | 13/16" | 5/32" | Super Spacer | 5/32" | Argon | | n/a | 0.27 | 0.21 | 0.48 | N, NC, SC, S |