

Structural Test Reports



| Description / Type | Style | Grade | Size | Report | Expiration Date | Specimen # | Air Infiltration cfm/ft ² | Water Resistance psf | Structural Pressure psf | Glass | Reinforcement Frame | Sash | Glazing | Special Manufacturing Or Installation | Model Tested | AWA or Other | Comments |
|------------------------------------|-------|---------|----------|-----------------|-----------------|------------|--------------------------------------|----------------------|-------------------------|---------|---------------------|------|---------|---------------------------------------|--------------|--------------|----------|
| Windgate/Belmont | | | | | | | | | | | | | | | | | |
| Double Hung | | H-R 20 | 52 x 84 | 30507.02-701-47 | 03/25/08 | 1 | 0.14 | 6.00 | 30.0 | 3/4" DS | None | LKB | Wet | No | 142.194 | AWA | |
| | | H-R 25 | 52 x 84 | 30507.02-701-47 | 03/25/08 | 2 | - | - | 37.5 | 3/4" DS | None | A | Wet | No | 142.194 | AWA | |
| | | H-R 30 | 43 x 59 | 30507.02-701-47 | 03/25/08 | 3 | - | - | 45.0 | 3/4" SS | None | N | Wet | No | 142.194 | AWA | |
| | | H-LC 30 | 44 x 77 | 52859.02-701-47 | 08/10/08 | 1 | 0.13 | 8.25 | 45.0 | 3/4" DS | None | A | Wet | No | 142.194 | AWA | |
| | | H-R 35 | 44 x 77 | 52859.02-701-47 | 08/10/08 | 2 | - | - | 52.5 | 3/4" DS | None | A | Wet | No | 142.194 | AWA | |
| | | H-R 35 | 40 x 72 | 52859.02-701-47 | 08/10/08 | 3 | - | - | 52.5 | 3/4" SS | None | A | Wet | No | 142.194 | AWA | |
| | | H-R 40 | 40 x 72 | 52859.02-701-47 | 08/10/08 | 4 | - | - | 60.0 | 3/4" DS | None | A | Wet | No | 142.194 | AWA | |
| | | H-R 40 | 43 x 59 | 30507.02-701-47 | 03/25/08 | 4 | - | - | 60.0 | 3/4" SS | None | LKB | Wet | No | 142.194 | AWA | |
| | | H-R 50 | 36 x 72 | 52859.02-701-47 | 08/10/08 | 5 | - | - | 75.0 | 3/4" DS | None | A | Wet | TL's, Dam, Large Lower Sash | 142.194 | AWA | |
| | | H-R 50 | 40 x 72 | 56267.02-201-47 | 08/01/09 | 1 | 0.07 | 7.50 | 75.0 | 3/4" DS | None | A | Wet | TL's, Dam, Large Lower Sash | 142.194 | AWA | |
| Single Hung | | H-R 20 | 52 x 84 | 07-30479.03 | 02/18/08 | 1 | 0.12 | 5.25 | 30.0 | 3/4" SS | F | A | Wet | No | 143.093 | Earthwise | |
| | | H-R 35 | 44 x 60 | 07-30479.03 | 02/18/08 | 2 | - | - | 60.0 | 3/4" SS | F | N | Wet | No | 143.093 | Earthwise | |
| | | H-R 35 | 44 x 60 | 07-30479.03 | 02/18/08 | 3 | - | - | 67.5 | 3/4" SS | F | L | Wet | No | 143.093 | Earthwise | |
| | | H-R 50 | 44 x 72 | 59605.02-701-47 | 07/14/09 | 1 | 0.09 | 7.50 | 75.0 | 3/4" DS | F | A | Wet | TL's, Dam, Sarge Lower Sash | 142.194 | AWA | |
| Single Slider | XOX | HS-R 20 | 120 x 60 | 54908.02-701-47 | 02/24/08 | 1 | 0.13 | 3.75 | 30.0 | 3/4" SS | F | L | Wet | No | 143.093 | Earthwise | |
| | XOX | HS-R 20 | 120 x 60 | 07-30480.03 | 02/24/08 | 1 | 0.13 | 3.75 | 30.0 | 3/4" SS | F | L | Wet | No | 143.093 | Earthwise | |
| | XOX | HS-R 20 | 120 x 60 | 54360.02-701-47 | 11/16/08 | 1 | 0.12 | 3.75 | 30.0 | 3/4" DS | F | L | Tape | No | 142.094 | AWA | |
| | XO | HS-R 35 | 72 x 48 | 54908.02-701-47 | 02/24/08 | 2 | - | 5.25 | 52.5 | 3/4" SS | F | L | Wet | No | 143.093 | Earthwise | |
| | XO | HS-R 35 | 72 x 48 | 54908.02-701-47 | 02/24/08 | 3 | - | 5.25 | 52.5 | 3/4" SS | F | N | Wet | No | 143.093 | Earthwise | |
| | XO | HS-R 35 | 72 x 48 | 07-30480.03 | 02/24/08 | 2 | - | 5.25 | 52.5 | 3/4" SS | F | L | Wet | No | 143.093 | Earthwise | |
| Two-Lite Slider (Windgate Only) | XX | HS-R 15 | 72 x 60 | 55194.02-701-47 | 01/07/09 | 1 | 0.20 | 4.50 | 22.5 | 3/4" SS | N | LK | Tape | No | 142.094 | AWA | |
| | XX | HS-R 15 | 72 x 48 | 55194.02-701-47 | 01/07/09 | 2 | - | - | 22.5 | 3/4" SS | N | N | Tape | No | 142.094 | AWA | |
| | XX | HS-R 25 | 72 x 48 | 55194.02-701-47 | 01/07/09 | 3 | - | - | 37.5 | 3/4" SS | N | LK | Tape | No | 142.094 | AWA | |
| Hawthorne | | | | | | | | | | | | | | | | | |
| Double Hung | | H-R 15 | 52 x 84 | 30483.02-701-47 | 03/22/08 | 1 | 0.08 | 6.00 | 22.5 | 3/4" SS | None | A | Tape | No | 144.091 | Earthwise | |
| | | H-R 20 | 52 x 84 | 07-30482.02 | 03/08/08 | 1 | 0.12 | 6.00 | 30.0 | 3/4" SS | None | A | Tape | No | 144.191 | Earthwise | |
| | | H-R 25 | 44 x 60 | 07-30482.02 | 03/08/08 | 2 | - | - | 37.5 | 3/4" SS | None | None | Tape | No | 144.191 | Earthwise | |
| | | H-R 30 | 44 x 60 | 30483.02-701-47 | 03/22/08 | 2 | - | - | 45.0 | 3/4" SS | None | None | Tape | No | 144.091 | Earthwise | |
| | | H-R 40 | 44 x 60 | 07-30482.02 | 03/08/08 | 3 | - | - | 67.5 | 3/4" SS | None | LKB | Tape | No | 144.191 | Earthwise | |
| | | H-R 40 | 44 x 60 | 30483.02-701-47 | 03/22/08 | 3 | - | - | 60.0 | 3/4" SS | None | LKB | Tape | No | 144.091 | Earthwise | |
| Two-Lite Slider (Belmont Also) | XXX | HS-R 15 | 120 x 60 | 30481.02-701-47 | 03/03/08 | 1 | 0.12 | 3.75 | 22.5 | 3/4" SS | N | LK | Wet | No | 144.093 | Earthwise | |
| | XX | HS-R 15 | 72 x 48 | 30481.02-701-47 | 03/03/08 | 3 | - | - | 22.5 | 3/4" SS | N | LK | Wet | No | 144.093 | Earthwise | |
| | XX | HS-R 20 | 72 x 60 | 30481.02-701-47 | 03/03/08 | 2 | - | - | 30.0 | 3/4" SS | N | N | Wet | No | 144.093 | Earthwise | |
| | XX | HS-R 20 | 72 x 48 | 30481.02-701-47 | 03/03/08 | 4 | - | - | 30.0 | 3/4" SS | N | L | Wet | No | 144.093 | Earthwise | |
| | XX | HS-R 35 | 72 x 40 | 30481.02-701-47 | 03/03/08 | 5 | - | - | 52.5 | 3/4" SS | N | L | Wet | No | 144.093 | Earthwise | |
| | XX | HS-R 40 | 72 x 40 | 30481.02-701-47 | 03/03/08 | 6 | - | - | 60.0 | 3/4" SS | N | LK | Wet | No | 144.093 | Earthwise | |

Structural Test Reports



| Description / Type | Style | Grade | Size | Report | Expiration Date | Specimen # | Air Infiltration cfm/ft ² | Water Resistance psf | Structural Pressure psf | Glass | Reinforcement Frame | Sash | Glazing | Special Manufacturing Or Installation | Model Tested | AWA or Other | Comments |
|-----------------------------------|-------|----------|----------|-----------------|-----------------|------------|--------------------------------------|----------------------|-------------------------|--------------|---------------------|------|---------|---------------------------------------|--------------|--------------|------------------------------|
| Windgate/Belmont/Hawthorne | | | | | | | | | | | | | | | | | |
| Casement | XOX | C-LC 20 | 108 x 78 | 56638.01-201-47 | 02/16/09 | 1 | 0.06 | 9.75 | 30.0 | 3/4" DS | 3S | S | Wet | 4 Point Tie Bar, 3 Snubber Sets | 141.194 | AWA | |
| | XX | C-LC 25 | 72 x 78 | 56638.01-201-47 | 02/16/09 | 2 | 0.04 | - | 37.5 | 3/4" DS | 3S | A | Wet | 4 Point Tie Bar, 3 Snubber Sets | 141.194 | AWA | |
| | XX | C-LC 45 | 48 x 60 | 56638.01-201-47 | 02/16/09 | 3 | - | - | 75.0 | 3/4" DS | N | N | Wet | 3 Point Tie Bar, 2 Snubber Sets | 141.194 | AWA | |
| | XX | C-LC 55 | 48 x 60 | 56638.01-201-47 | 02/16/09 | 4 | - | - | 82.5 | 3/4" DS | 3S | S | Wet | 3 Point Tie Bar, 3 Snubber Sets | 141.194 | AWA | |
| | X | C-LC 55 | 36 x 72 | 56266.02-201-47 | 08/15/09 | 1 | 0.01 | 12.00 | 82.5 | 3/4" DS | 3S, 1H | A | Wet | 4 Point Tie Bar, 6 Snubber Sets | 141.194 | AWA | See DP 50 Tab for details |
| Fixed Casement | | F-R 45 | 48 x 72 | 54363.02-701-47 | 01/19/09 | 1 | 0.01 | 12.00 | 67.5 | 3/4" SS | HSJ | N | Wet | No | 141.194 | AWA | |
| | | F-C 50 | 48 x 72 | 07-30277.04 | 07/31/06 | 1 | 0.02 | 12.00 | 75.0 | 3/4" DS | N | A | Tape | 1-3/4" Screws every 12" | 141.194 | AWA | |
| | | F-LC 55 | 60 x 60 | 57193.02-701-47 | 08/02/09 | 2 | 0.01 | 12.00 | 82.5 | 3/4" DS | N | N | Wet | Sash Screwed to Frame Every 4" | 141.194 | AWA | |
| | | F-LC 70 | 72 x 60 | 57193.02-701-47 | 08/02/09 | 1 | 0.01 | 12.00 | 105.0 | 3/4" TS | N | N | Wet | Sash Screwed to Frame Every 4" | 141.194 | AWA | Installation Screws required |
| Awning | | AP-LC 30 | 48 x 36 | 07-30276.02 | 07/31/06 | 1 | 0.04 | 12.00 | 45.0 | 3/4" SS | HSJ | None | Tape | No | 141.194 | AWA | |
| | | AP-LC 30 | 48 x 36 | 54362.02-701-47 | 01/19/09 | 1 | 0.07 | 12.00 | 45.0 | 3/4" SS | HSJ | None | Wet | 1 Snubber Set | 141.194 | AWA | |
| | | AP-LC 40 | 48 x 36 | 07-30276.02 | 07/31/06 | 2 | - | - | 60.0 | 3/4" SS | HSJ | A | Tape | No | 141.194 | AWA | |
| Picture | | F-C 30 | 96 x 60 | 07-30478.03 | 02/11/08 | 1 | 0.01 | 12.00 | 45.0 | YY | N | N | Wet | No | 143.000 | Earthwise | |
| | | F-C 40 | 72 x 60 | 07-30478.03 | 02/11/08 | 2 | - | - | 60.0 | XX | N | N | Wet | No | 143.000 | Earthwise | |
| | | F-LC 50 | 60 x 60 | 56090.02-201-47 | 07/07/09 | 2 | 0.01 | 12.00 | 75.0 | 3/4" DS | N | N | Tape | Wood Screw Back-up all Around | 142.000 | AWA | See DP 50 Tab for details |
| | | F-LC 50 | 72 x 60 | 56090.02-201-47 | 07/07/09 | 1 | 0.01 | 12.00 | 75.0 | 3/4" TS | N | N | Tape | Wood Screw Back-up all Around | 142.000 | AWA | See DP 50 Tab for details |
| | | F-C 55 | 72 x 96 | 55193.02-701-47 | 12/10/08 | 1 | 0.02 | 12.00 | 82.5 | 1-1/4" Temp | N | N | Tape | | 142.000 | AWA | |
| | | F-C 60 | 84 x 84 | 55193.02-701-47 | 12/10/08 | 2 | - | 12.00 | 90.0 | 1-1/4" Temp | N | N | Tape | Special Glazing Bead | 142.000 | AWA | |
| Patio Door | XO | SGD-R 35 | 72 x 80 | 53327.01-701-47 | 9/8/2008 | 1 | 0.12 | 6.75 | 52.5 | 3/4" DS Temp | F | PL | Tape | No | 59.06 | AWA | |

Dayton claims they are working on a window that will meet the missile impact tests. They are basing the design on the 145 system, but say it will be waivable to AWA and Earthwise platforms as well. Product line will include DH, SH, SS, HS, PW, CSMT, AWN as I understand it. Hawthorne DH may not be included. Timing per Dayton is for testing to be complete by August. This is not to be confused with the need for DP50. Dayton's design will probably include many of the special items needed for DP50 but there will be some differences as well (ie: laminated glass, tilt latch, etc). Dayton is using information learned from our DP50 testing, but is footing the expensive bill for the impact tests.

Codes

| Glass | Frame Reinforcement | Sash Reinforcement | Glazing |
|-----------------------|--------------------------|---------------------------|-------------|
| SS = 3/4" IG 3/32" SS | N = None | N = None | Wet = Wet |
| DS = 3/4" IG 1/8" DS | F = Fixed Meeting R or S | S = Stiles Only | Tape = Tape |
| TS = 3/4" IG 3/16" | H = Head, Sill, Jambs | R = Rails Only | |
| XX = 13/16" IG 1/8" | S = Sill | A = All S & R | |
| YY = 13/16" IG 3/16" | J = Jambs | L = Lock R or S | |
| | T = Installation | K = Keeper R or S | |
| | 8308 = 8308 Installation | M = Lock & Keeper R or S | |
| | | B = Bottom Lift | |
| | | I = Interlocking Astragal | |
| | | P = PD Pull Stile w Lock | |

**File Name Used On
Structural CD**

WG BM DH Exp 03-25-08
WG BM DH Exp 03-25-08
WG BM DH Exp 03-25-08
WG BM DH DP50 Exp 08-10-08
WG BM DH DP50 Exp 08-10-08
WG BM DH DP50 Exp 08-10-08
WG BM DH DP50 Exp 08-10-08
WG BM DH Exp 03-25-08
WG BM DH DP50 Exp 08-10-08
WG BM DH DP50 Exp 08-01-09

WG BM SH Exp 02-18-08
WG BM SH Exp 02-18-08
WG BM SH Exp 02-18-08
WG BM SH DP50 Exp 07-14-09

WG BM SS XO XOX Exp 02-24-08
WG BM SS Exp 02-24-08
WG BM SS XO XOX Exp 02-24-08
WG BM SS XO XOX Exp 02-24-08
WG BM SS XO XOX Exp 02-24-08
WG BM SS Exp 02-24-08

WG BM HS 2-lite Exp 01-17-09
WG BM HS 2-lite Exp 01-17-09
WG BM HS 2-lite Exp 01-17-09

HT DH #2 Exp 03-22-08
HT DH Exp 03-08-08
HT DH Exp 03-08-08
HT DH #2 Exp 03-22-08
HT DH Exp 03-08-08
HT DH #2 Exp 03-22-08

HT 2-lite Exp 03-08-08
HT 2-lite Exp 03-08-08
HT 2-lite Exp 03-08-08
HT 2-lite Exp 03-08-08
HT 2-lite Exp 03-08-08
HT 2-lite Exp 03-08-08

**File Name Used On
Structural CD**

HT BM WG CM Exp 02-16-09
HT BM WG CM Exp 02-16-09
HT BM WG CM Exp 02-16-09
HT BM WG CM Exp 02-16-09
HT BM WG CM DP50 Exp 08-15-09

HT BM WG FC Exp 01-19-09
HT BM WG FC Exp 07-31-06
HT BM WG FC DP50 Exp 08-02-09
HT BM WG FC DP50 Exp 08-02-09

HT BM WG CM AW Exp 07-31-06
HT BM WG CM AW Exp 01-19-09
HT BM WG CM AW Exp 07-31-06

HT BM WG CM PW Exp 02-11-08
HT BM WG CM PW Exp 02-11-08
HT BM WG CM PW DP50 Exp 07-07-08

HT BM WG CM PW 1.250 Glass Exp 12-10-08
HT BM WG CM PW 1.250 Glass Exp 12-10-08

SGD PD Exp 08-08-08

