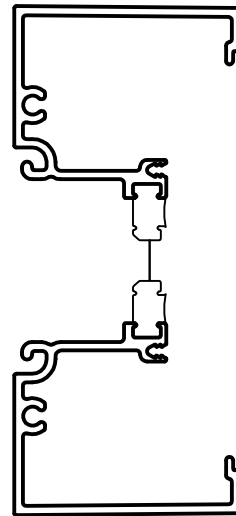
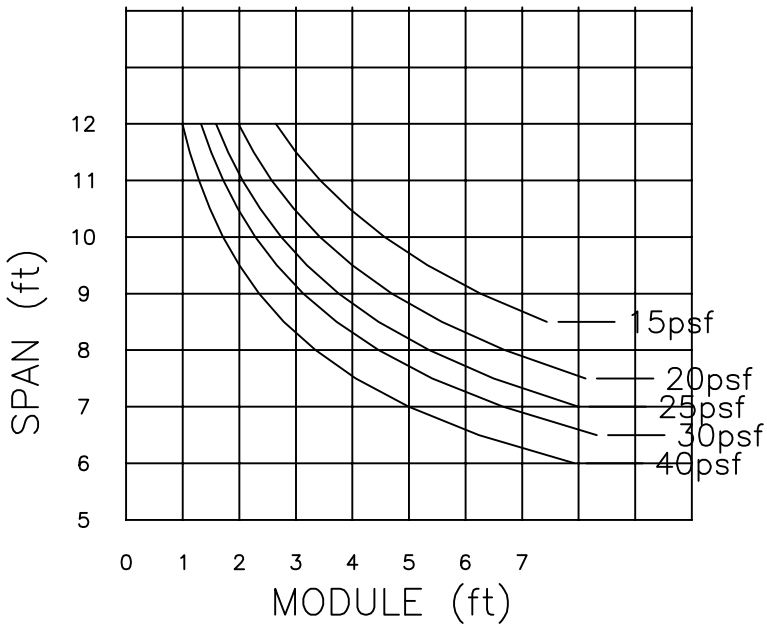
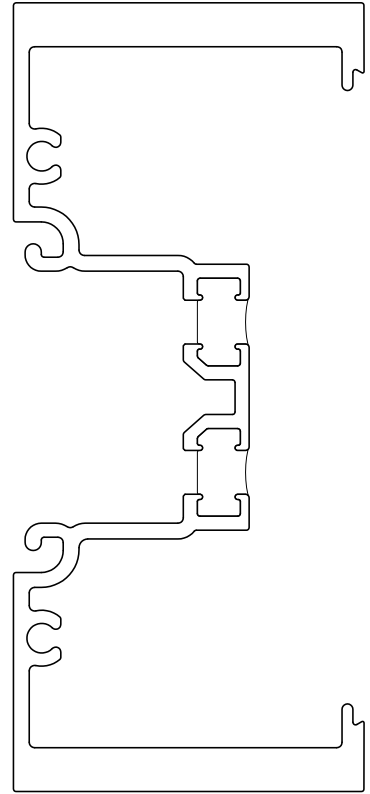
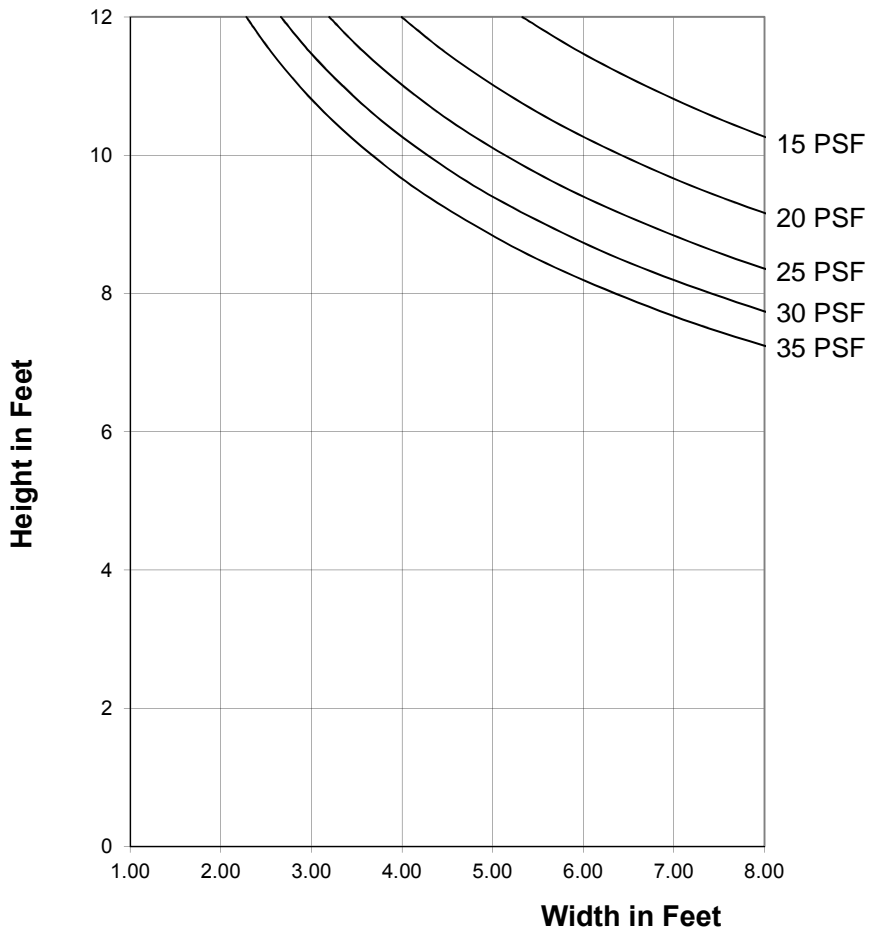


TU24441 Double Thermal Standard Vertical @ 120" Length

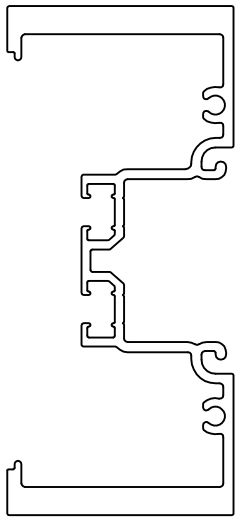
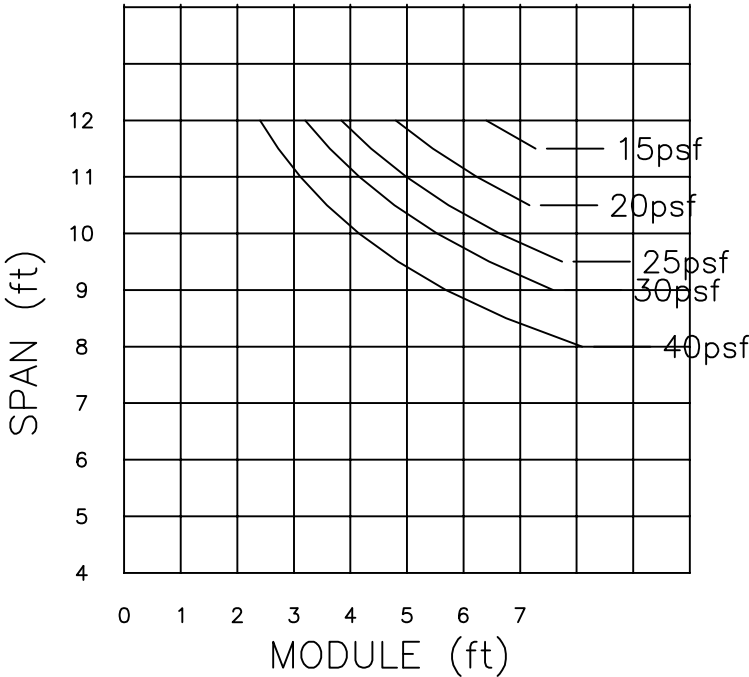


| WINDLOAD CRITERIA | |
|-------------------|-----------------------|
| Type of Loading | Uniform |
| Ixx | 2.249 in ⁴ |
| Sxx(max) | N/A in ³ |
| Area | N/A in ² |
| Criteria L/x | x = 175 in |
| Max Deflection | N/A in |

TU24435 Heavy Vertical
L/175 < 13'-6"
L/240 + 1/4" > 13'-6"
15151 psi maximum stress

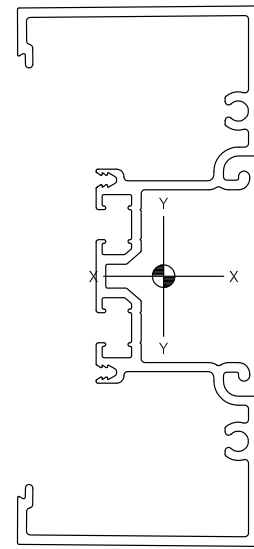
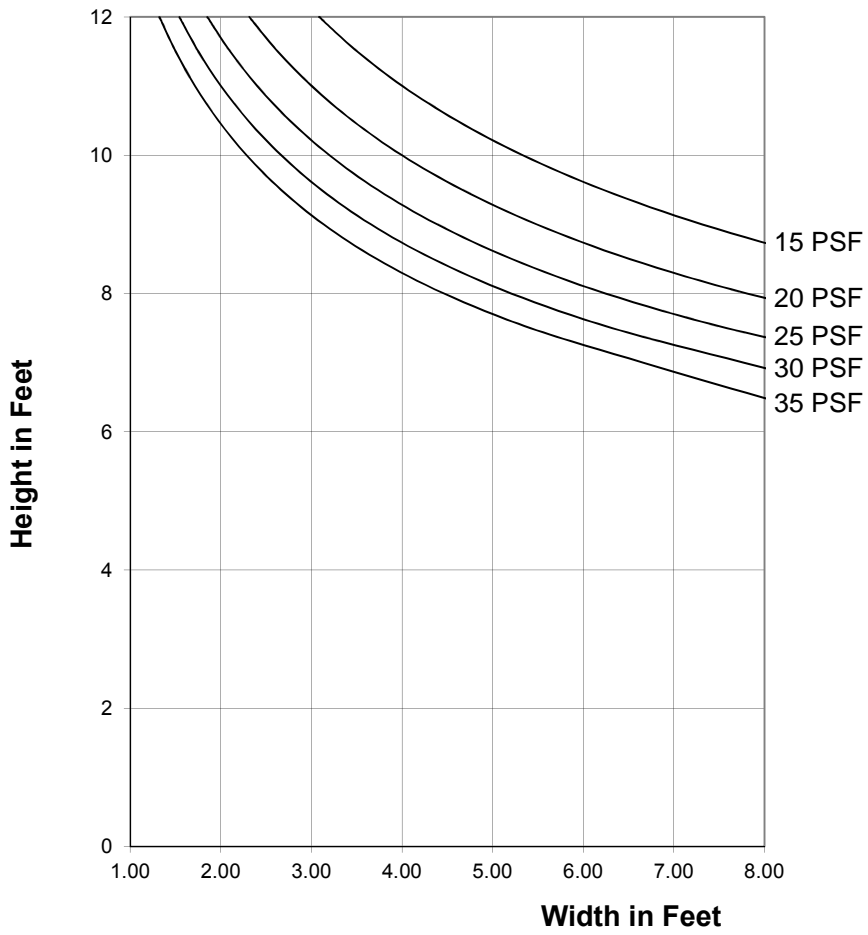


E24435 Heavy Wall Mullion



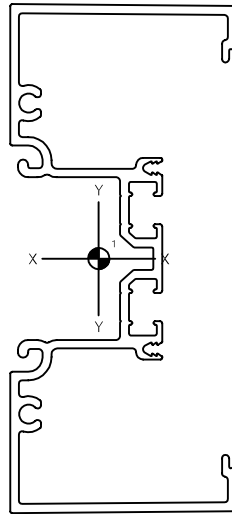
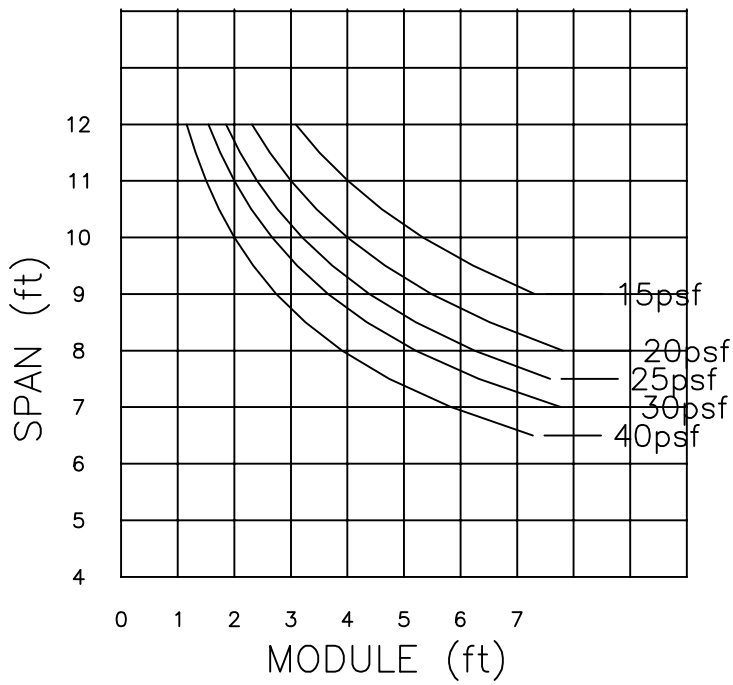
| WINDLOAD CRITERIA | |
|-------------------|-----------------------|
| Type of Loading | Uniform |
| Ixx | 5.445 in ⁴ |
| Sxx(max) | 1.167 in ³ |
| Area | 1.761 in ² |
| Criteria L/x | x = 175 in |
| Max Deflection | N/A in |

E24441 Standard Vertical
 $L/175 < 13'-6"$
 $L/240 + 1/4" > 13'-6"$
15151 psi maximum stress



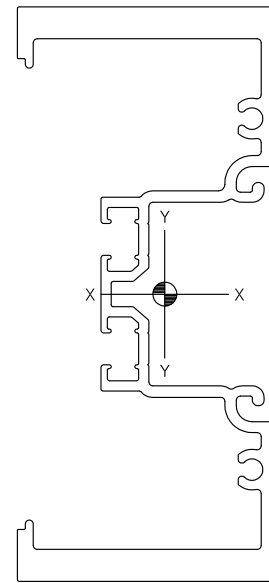
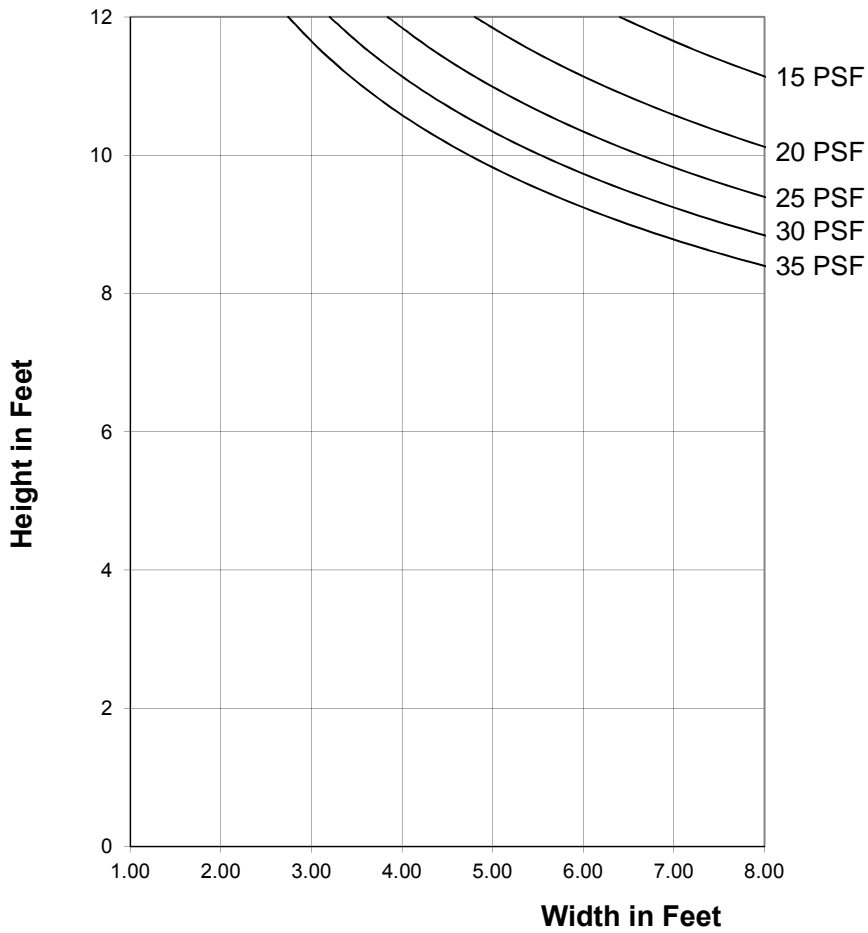
| SECTION PROPERTIES | | | | | |
|--------------------|--------|-----------------|-----------|-------|-----------------|
| Ixx | 2.625 | in ⁴ | Iyy | .418 | in ⁴ |
| Sxx(max) | 1.167 | in ³ | Syy(max) | .535 | in ³ |
| Sxx(min) | 1.167 | in ³ | Syy(min) | .343 | in ³ |
| rxx | 1.534 | in | ryy | .612 | in |
| Area | 1.116 | in ² | Weight | 1.312 | lbs/ft |
| Perim. | 28.912 | in | Wall Thk. | 0 | in |

E24441 Standard Vertical



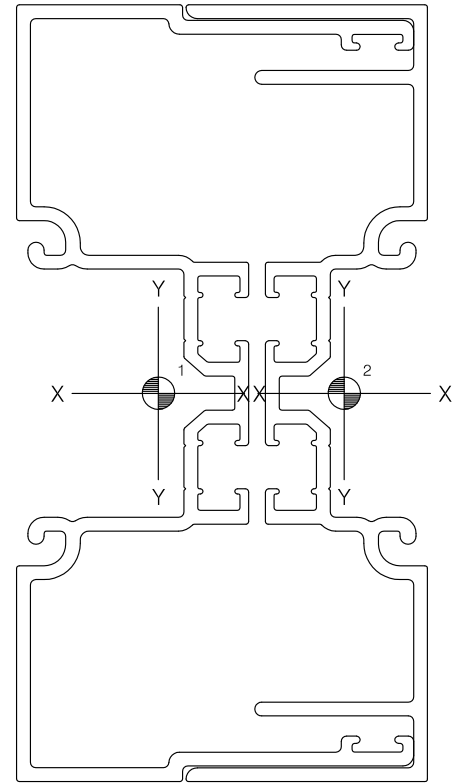
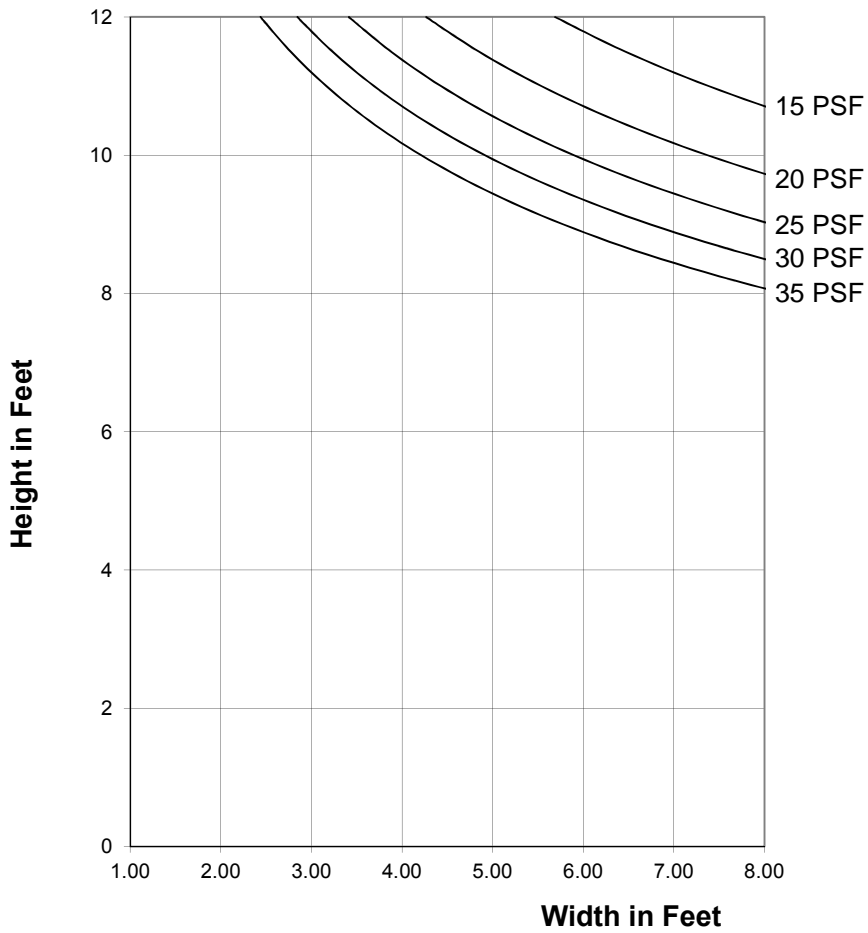
| WINDLOAD CRITERIA | |
|-------------------|-----------------------|
| Type of Loading | Uniform |
| Ixx | 2.625 in ⁴ |
| Sxx(max) | 1.167 in ³ |
| Area | 1.116 in ² |
| Criteria L/x | x = 175 in |
| Max Deflection | N/A in |

E24435 Heavy Vertical
 $L/175 < 13'-6"$
 $L/240 + 1/4" > 13'-6"$
15151 psi maximum stress



| SECTION PROPERTIES | | | | | |
|--------------------|--------|-----------------|-----------|-------|-----------------|
| Ixx | 5.445 | in ⁴ | Iyy | .635 | in ⁴ |
| Sxx(max) | 2.420 | in ³ | Syy(max) | .752 | in ³ |
| Sxx(min) | 2.420 | in ³ | Syy(min) | .549 | in ³ |
| rxx | 1.758 | in | ryy | .600 | in |
| Area | 1.761 | in ² | Weight | 2.071 | lbs/ft |
| Perfm. | 26.705 | in | Wall Thk. | 0 | in |

E24346 / E24336 Expansion Mullion
 $L/175 < 13'-6"$
 $L/240 + 1/4" > 13'-6"$
15151 psi maximum stress

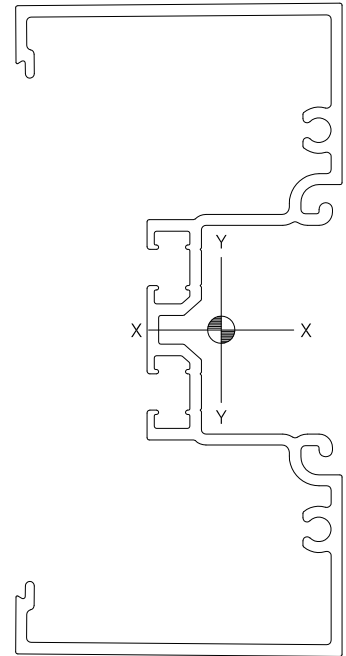
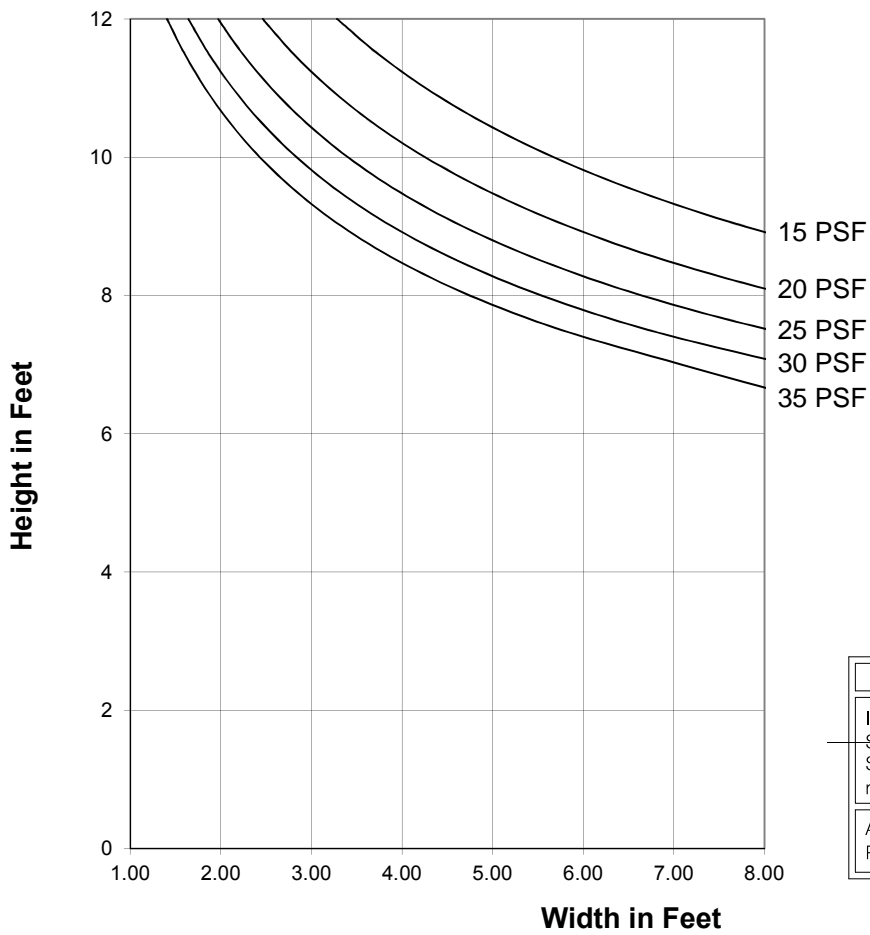


| 1 | SECTION PROPERTIES | | | | ALUM |
|----------|--------------------|-----------------|-----------|-------|-----------------|
| Ixx | 2.597 | in ⁴ | Iyy | 0.441 | in ⁴ |
| Sxx(max) | 1.154 | in ³ | Syy(max) | 0.537 | in ³ |
| Sxx(min) | 1.154 | in ³ | Syy(min) | 0.298 | in ³ |
| rxx | 1.567 | in | ryy | 0.646 | in |
| Area | 1.058 | in ² | Weight | 1.244 | lbs/ft |
| Perim. | 26.938 | in | Wall Thk. | 0.000 | in |

| 2 | SECTION PROPERTIES | | | | ALUM |
|----------|--------------------|-----------------|-----------|-------|-----------------|
| Ixx | 2.241 | in ⁴ | Iyy | 0.121 | in ⁴ |
| Sxx(max) | 0.996 | in ³ | Syy(max) | 0.251 | in ³ |
| Sxx(min) | 0.996 | in ³ | Syy(min) | 0.132 | in ³ |
| rxx | 1.535 | in | ryy | 0.357 | in |
| Area | 0.951 | in ² | Weight | 1.118 | lbs/ft |
| Perim. | 24.098 | in | Wall Thk. | 0.000 | in |

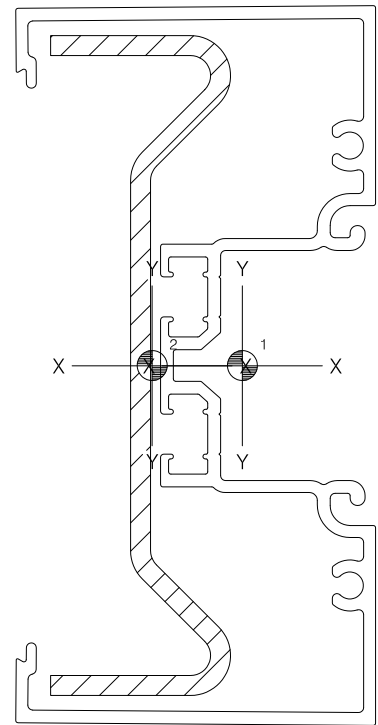
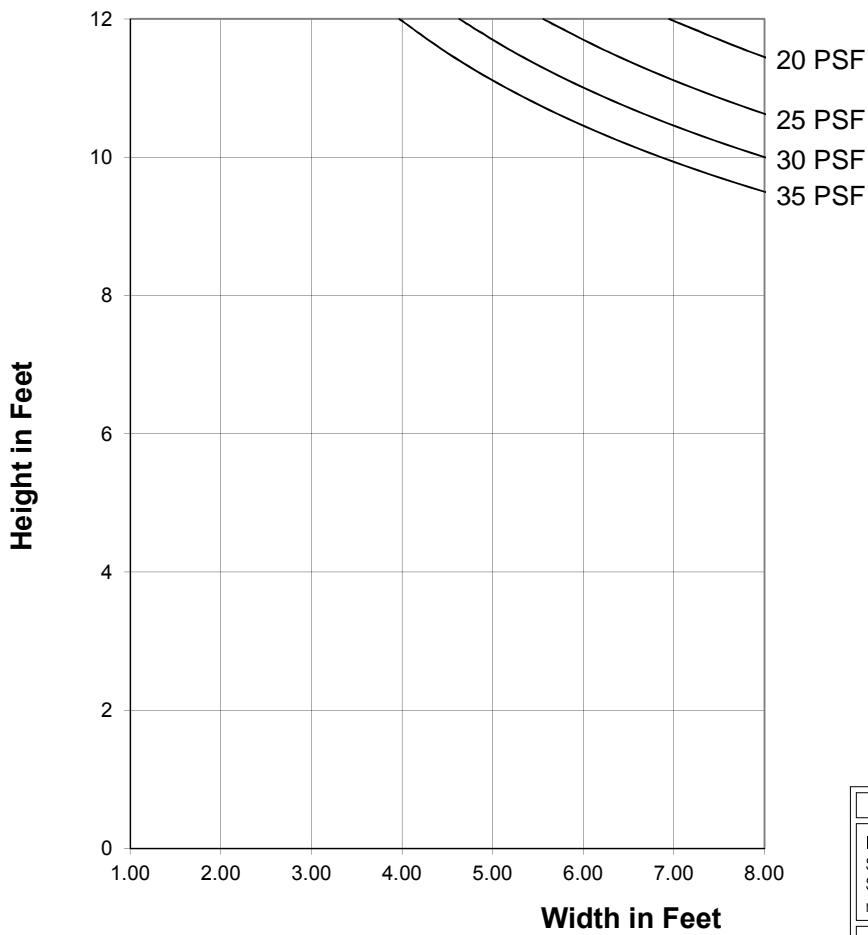
| SECTION PROPERTIES (ASSEMBLY) | | | | | |
|-------------------------------|-------|-----------------|--------|-------|-----------------|
| Ixx | 4.838 | in ⁴ | Iyy | 0.562 | in ⁴ |
| Area | 2.008 | in ² | Weight | 2.362 | lbs/ft |

E24243 Vertical for Steel Reinforcing
 $L/175 < 13'-6"$
 $L/240 + 1/4" > 13'-6"$
15151 psi maximum stress



| SECTION PROPERTIES | | | | | |
|--------------------|--------|-----------------|-----------|-------|-----------------|
| Ixx | 2.793 | in ⁴ | Iyy | .526 | in ⁴ |
| Sxx(max) | 1.242 | in ³ | Syy(max) | .631 | in ³ |
| Sxx(min) | 1.241 | in ³ | Syy(min) | .371 | in ³ |
| rx | 1.580 | in | ry | .686 | in |
| Area | 1.119 | in ² | Weight | 1.316 | lbs/ft |
| Perim. | 28.813 | in | Wall Thk. | 0 | in |

**E24243 Vertical for Steel Reinforcing
with P1437 Steel
L/175 < 13'-6"
L/240 + 1/4" > 13'-6"
15151 psi maximum stress**

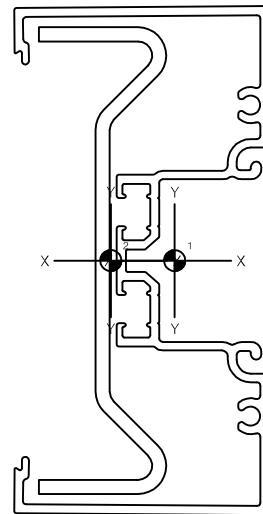
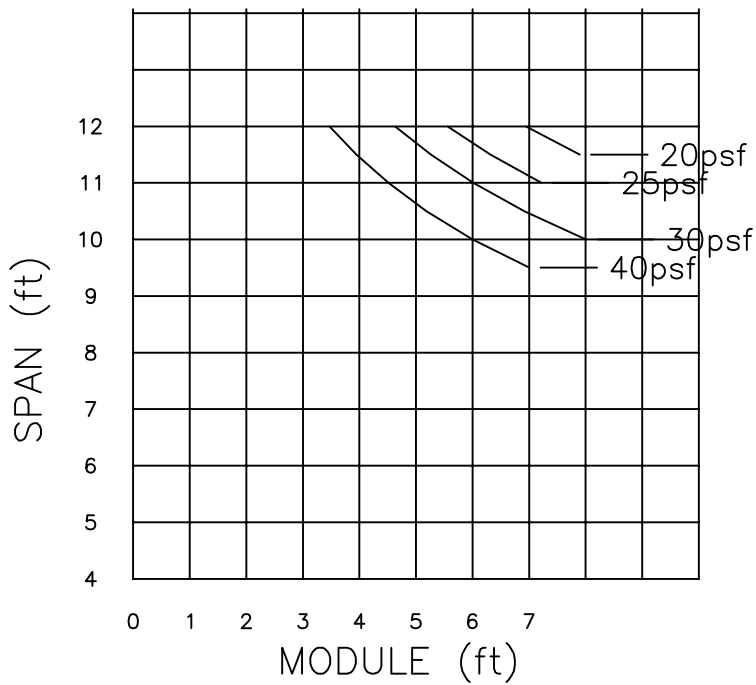


| SECTION PROPERTIES | | | | 1 | ALUM |
|--------------------|--------|-----------------|-----------|-------|-----------------|
| Ixx | 2.793 | in ⁴ | Iyy | 0.526 | in ⁴ |
| Sxx(max) | 1.242 | in ³ | Syy(max) | 0.631 | in ³ |
| Sxx(min) | 1.241 | in ³ | Syy(min) | 0.371 | in ³ |
| rxx | 1.580 | in | ryy | 0.686 | in |
| Area | 1.119 | in ² | Weight | 1.316 | lbs/ft |
| Perim. | 28.813 | in | Wall Thk. | 0.000 | in |

| SECTION PROPERTIES | | | | 2 | STL |
|--------------------|--------|-----------------|-----------|-------|-----------------|
| Ixx | 1.754 | in ⁴ | Iyy | 0.047 | in ⁴ |
| Sxx(max) | 0.850 | in ³ | Syy(max) | 0.096 | in ³ |
| Sxx(min) | 0.850 | in ³ | Syy(min) | 0.074 | in ³ |
| rxx | 1.487 | in | ryy | 0.244 | in |
| Area | 0.793 | in ² | Weight | 2.703 | lbs/ft |
| Perim. | 12.942 | in | Wall Thk. | 0.000 | in |

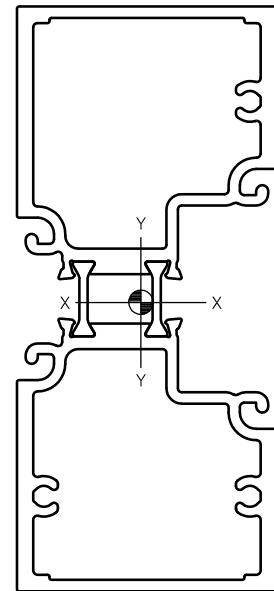
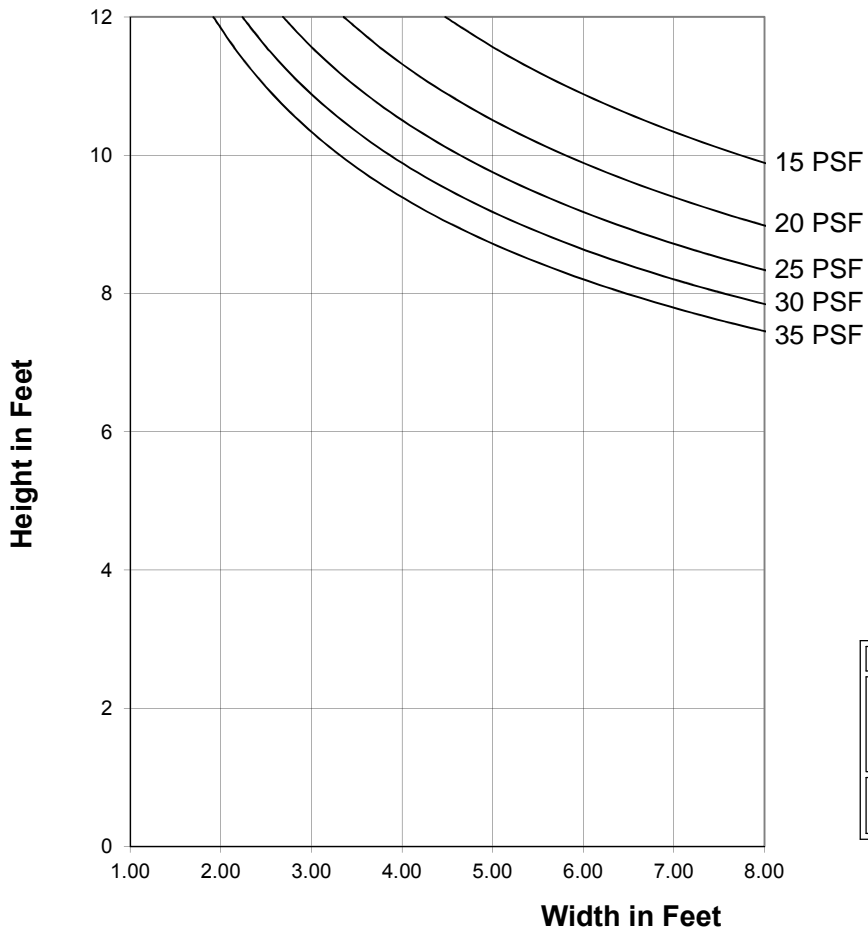
| SECTION PROPERTIES (ASSEMBLY) | | | | | |
|-------------------------------|-------|-----------------|--------|-------|-----------------|
| Ixx | 7.880 | in ⁴ | Iyy | 0.662 | in ⁴ |
| Area | 1.912 | in ² | Weight | 4.019 | lbs/ft |

E24243 Steel Reinforced Mullion



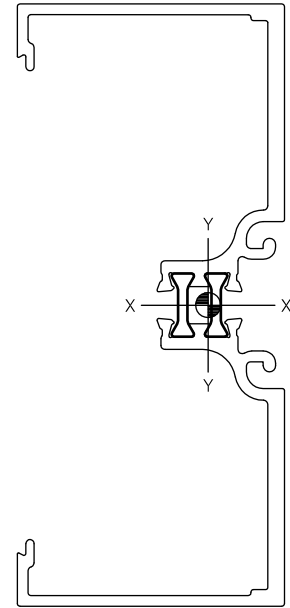
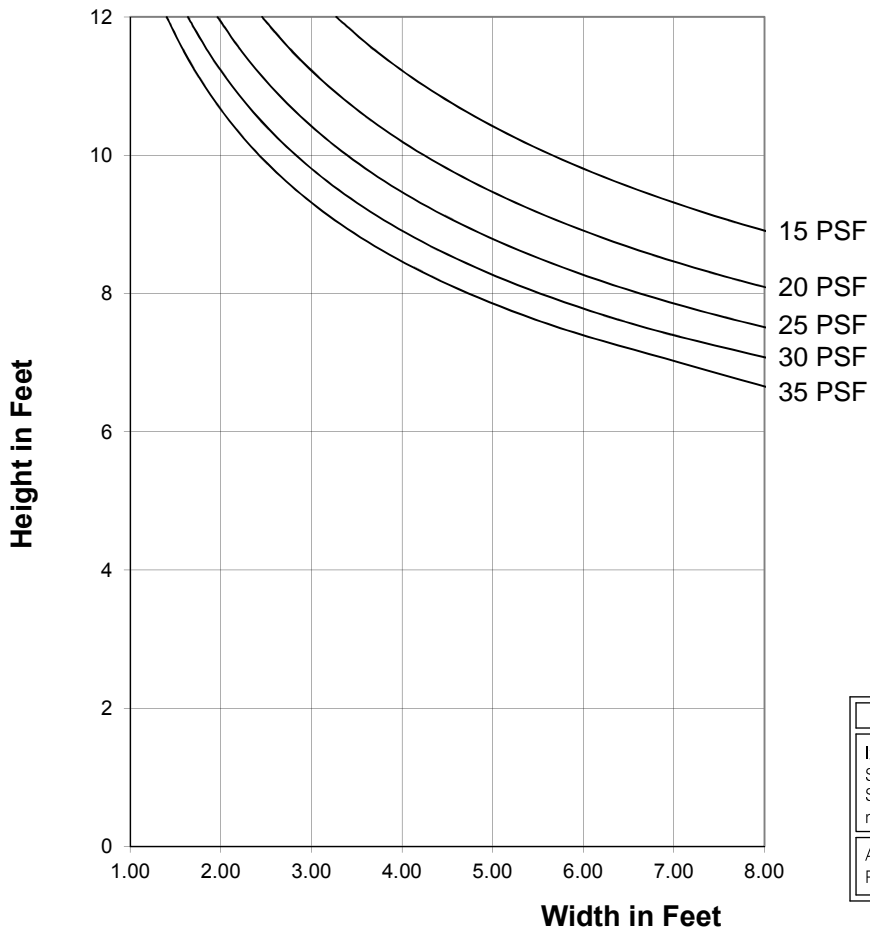
| WINDLOAD CRITERIA | |
|-------------------|-----------------------|
| Type of Loading | Uniform |
| Ixx | 7.880 in ⁴ |
| Sxx(max) | N/A in ³ |
| Area | 1.912 in ² |
| Criteria L/x | x = 175 in |
| Max Deflection | N/A in |

A624142 Door Jamb
 $L/175 < 13'-6"$
 $L/240 + 1/4" > 13'-6"$
15151 psi maximum stress



| SECTION PROPERTIES | | | | | |
|----------------------|--------|---------------|----------------------|-------|---------------|
| I_{xx} | 3.808 | in^4 | I_{yy} | .972 | in^4 |
| $S_{xx}(\text{max})$ | 1.712 | in^3 | $S_{yy}(\text{max})$ | 1.019 | in^3 |
| $S_{xx}(\text{min})$ | 1.673 | in^3 | $S_{yy}(\text{min})$ | .928 | in^3 |
| r_{xx} | 1.446 | in | r_{yy} | .730 | in |
| Area | 1.821 | in^2 | Weight | 2.141 | lbs/ft |
| Perim. | 19.504 | in | Wall Thk. | 0 | in |

A624040 Door Jamb
 $L/175 < 13'-6"$
 $L/240 + 1/4" > 13'-6"$
15151 psi maximum stress



| SECTION PROPERTIES | | | | | |
|--------------------|--------|-----------------|-----------|-------|-----------------|
| Ixx | 2.785 | in ⁴ | Iyy | .423 | in ⁴ |
| Sxx(max) | 1.235 | in ³ | Syy(max) | .740 | in ³ |
| Sxx(min) | 1.235 | in ³ | Syy(min) | .296 | in ³ |
| rxx | 1.583 | in | ryy | .617 | in |
| Area | 1.111 | in ² | Weight | 1.306 | lbs/ft |
| Perim. | 23.363 | in | Wall Thk. | 0 | in |