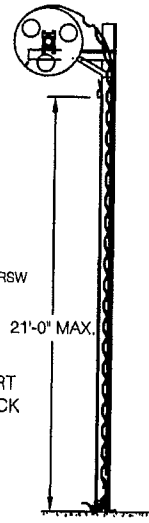
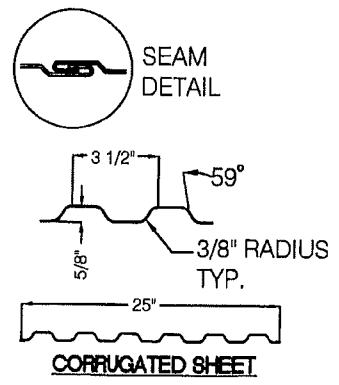
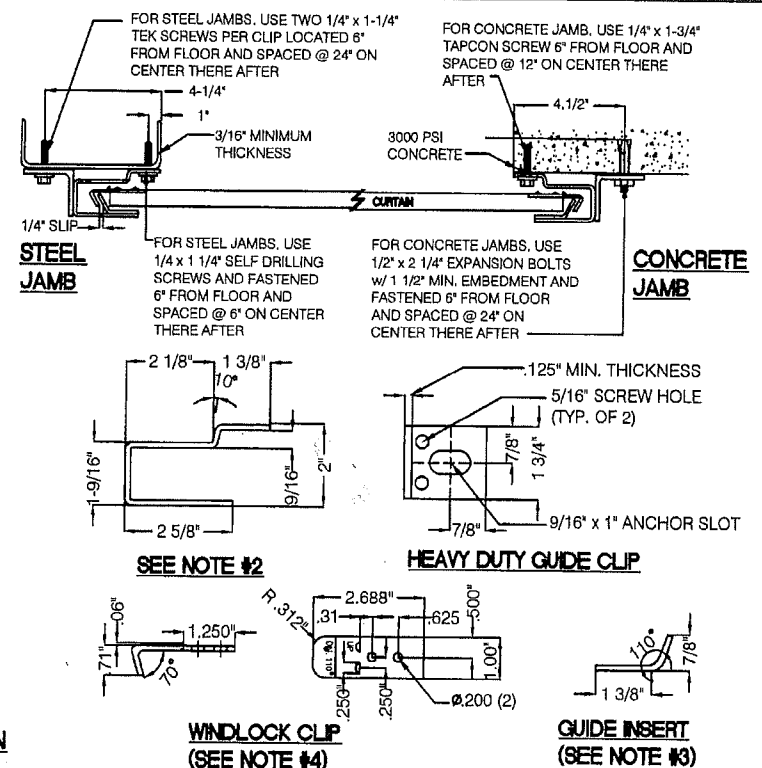


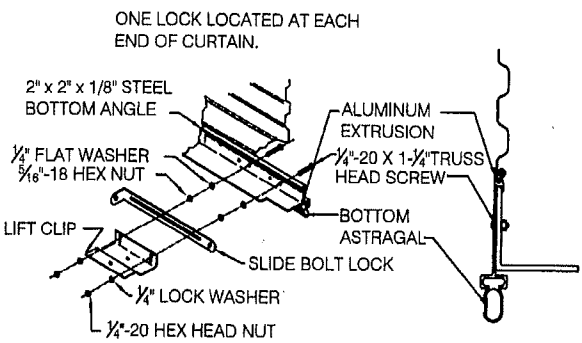
**INTERIOR ELEVATION**



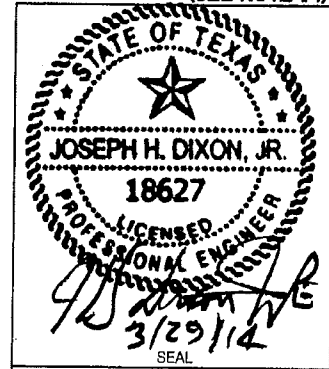
**SIDE ELEVATION**



**CORRUGATED SHEET**



**SLIDE BOLT LOCK AND BOTTOM BAR**



**ASTA Door Corporation**  
 4255 McEver Industrial Dr.  
 Acworth, GA 30101  
 PH: (770) 974-2600/Fax: (770) 974-1455  
 www.astadoor.com

**MODEL 203M WINDLOCK COMMERCIAL SHEET DOOR**

SCALE: VARIES (DO NOT SCALE DRAWINGS)

| TOLERANCES |                     |
|------------|---------------------|
| FRACTION   | = +/- 1/32          |
| .X         | = +/- .032          |
| .XX        | = +/- .015          |
| .XXX       | = +/- .005 < +/- .5 |

DRAWN BY: BCLLC ISSUE: 02-11-14

|                                    |                                    |   |
|------------------------------------|------------------------------------|---|
| <b>TEST SIZE</b><br>14'-0"W x 10'H | <b>DESIGN PRESSURE</b><br>+/- 40.0 | <b>TEST PRESSURE</b><br>+/- 60  |
| <b>MODELS</b><br>203M<br>204M      |                                    | <b>TEST LOCATION</b><br>CERTIFIED TESTING LABORATORIES<br>124 PREMIER ROAD<br>ORLANDO, FL 32822 |

# GENERAL NOTES:

1. STEEL FOR CORRUGATED SHEET ASTM-A653 WITH MINIMUM YIELD STRENGTH OF 80 KSI AND TENSILE STRENGTH OF 82 KSI. (GRADE 80)
2. GUIDES ROLL FORMED (12) GAUGE GALVANIZED STEEL.
3. GUIDE INSERT FORMED (12) GAUGE GALVANIZED STEEL.
4. (10) GAUGE GALVANIZED STEEL WINDLOCK CLIP FASTENED WITH TWO 3/16" x .440" POP RIVETS ON SIX CORRUGATIONS PER SIDE OF EACH SHEET.
5. THIS DOOR HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND THE INTERNATIONAL BUILDING CODE. THE DESIGN WIND PRESSURES REQUIRED FOR ANY DOOR SHALL BE DETERMINED USING THE APPROPRIATE SECTION OF THE CODE HAVING JURISDICTION WHERE THE BUILDING IS LOCATED.
6. THIS DOOR HAS BEEN SUCCESSFULLY TESTED TO:
  - THE UNIFORM STATIC AIR PRESSURE TEST PER ASTM E-330 AND ANSI/DASMA 108 TO A DESIGN LOAD OF +/- 40.0PSF
  - REFERENCE ELEMENT-ORLANDO, TEST REPORT #ESP010520P, DATED: 8/17/12.
7. ALL FASTENERS SHALL BE GALVANIZED OR ZINC COATED WITH A MINIMUM TENSILE STRENGTH OF 60 KSI.
8. BOTTOM BAR ASSEMBLY FASTENED 5 3/4" FROM EACH END AND 12" O.C. FROM CENTER USING 1/4" x 1" CARRIAGE BOLTS.

## 203M Sheet Door

Summary of Catenary Forces for alternative doors

Compared to Element Materials Technology Report No.: ESP010520P, dated 8/17/12

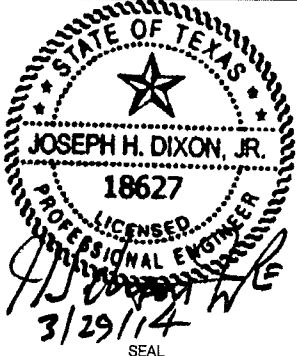

Rolling Sheet Door

Test Door: 14' wide x 10' high, Design Windload +/- 40.0 psf

Static air pressure test conducted in accordance with ASTM E330-02 and DASMA 108-05

|   | Width |         | Design Windload |              | Sheet Door     |  |
|---|-------|---------|-----------------|--------------|----------------|--|
|   | ft    | Pos psf | Neg psf         | Model        | gage in        |  |
| 14 x 10 Test Door   | 14    | 40      | 40              | 203M<br>204M | 0.017<br>0.017 |  |
| Calibration calculations for test door  |       |         |                 |              |                |  |
| <b>Comparative forces by calculation to determine maximum design pressure</b> |       |         |                 |              |                |  |
| Max Door Size   |       |         |                 |              |                |  |
| 8 x 21  | 8     | 69.4    | 69.4            | 203M         | 0.017          |  |
| 9 x 21  | 9     | 69.4    | 69.4            | 203M         | 0.017          |  |
| 10 x 21   | 10    | 69.4    | 69.4            | 203M         | 0.017          |  |
| 11 x 21   | 11    | 59.1    | 59.1            | 203M         | 0.017          |  |
| 12 x 21   | 12    | 51.2    | 51.2            | 203M         | 0.017          |  |
| 13 x 21   | 13    | 45.0    | 45.0            | 203M         | 0.017          |  |
| 14 x 21   | 14    | 40.0    | 40.0            | 203M         | 0.017          |  |
| 15 x 21   | 15    | 35.9    | 35.9            | 203M         | 0.017          |  |
| 16 x 21   | 16    | 32.4    | 32.4            | 203M         | 0.017          |  |
| 17 x 21   | 17    | 29.5    | 29.5            | 203M         | 0.017          |  |
| 18 x 21   | 18    | 27.0    | 27.0            | 203M         | 0.017          |  |

Design wind forces are calculated to produce catenary forces at the guides equal to or less than those calculated for the test door. This indicates that the curtain, windlocks, windlock connections, guide angles, and jamb anchorages will all be stressed to approximately the same as those in the test door, provided that the door is constructed the same for all opening widths.

|   |  |   |                                |
|---|--|---|--------------------------------|
|   |  4255 McEver Industrial Dr.<br>Acworth, GA 30101<br>PH: (770) 974-2600/Fax: (770) 974-1455<br>ASTA Door Corporation www.astadoor.com |   |                                |
|   | <b>MODEL 203M WINDLOCK COMMERCIAL SHEET DOOR</b>   |   |                                |
| SCALE : VARIES (DO NOT SCALE DRAWINGS)<br>TOLERANCES<br>FRACTION = +/- 1/32<br>.X = +/- .032<br>.XX = +/- .015<br>.XXX = +/- .005 < +/- 5 | <b>TEST SIZE</b><br>14'-0"W x 10'H   | <b>DESIGN PRESSURE</b><br>+/- 400   | <b>TEST PRESSURE</b><br>+/- 60 |
| DRAWN BY: BCLLC    ISSUE: 02-11-14  | <b>MODELS</b><br>203M<br>204M  | <b>TEST LOCATION</b><br>CERTIFIED TESTING LABORATORIES<br>124 PREMIER ROAD<br>ORLANDO, FL 32822 |                                |
| DRAWING #507-3-203M-2   |  |   | SHEET 2 OF 2                   |

ASTA Door Corp  
Job No. 34003

203M Sheet Door

Joseph H. Dixon, Jr. P.E.  
FL 7768, TX 18627  
02/02/14

Summary of Catenary Forces for alternative doors for TDI (TEXAS)  
Compared to Element Materials Technology Report No.: ESP010520P, dated 8/17/12

Rolling Sheet Door

Test Door: 14' wide x 10' high, Design Windload +/- 40.0 psf

Static air pressure test conducted in accordance with ASTM E330-02 and DASMA 108-05

|   | Width | Design Windload |         | Sheet Door |         | Catenary Force |              | Remarks  |
|---|-------|-----------------|---------|------------|---------|----------------|--------------|--|
|   | ft    | Pos psf         | Neg psf | Model      | gage in | Pos wind plf   | Neg wind plf |  |
| 14 x 10 Test Door   | 14    | 40              | 40      | 203M       | 0.017   |                |              | Test Door<br>Design test pressure: +40 / -40 psf<br>Max test pressure: +60.0 / -60.0 psf<br>slip = 0.25 in |
| Calibration calculations for test door  |       |                 |         |            |         |                |              | 2035 2035  |
| <b>Comparative forces by calculation to determine maximum design pressure</b> |       |                 |         |            |         |                |              | All doors constructed same as test door slip = 0.25 in   |
| Max Door Size   |       |                 |         |            |         |                |              |  |
| 8 x 21  | 8     | 69.4            | 69.4    | 203M       | 0.017   | ≤ 2034         | ≤ 2034       | Forces ≤ test door, OK   |
| 9 x 21  | 9     | 69.4            | 69.4    | 203M       | 0.017   | ≤ 2034         | ≤ 2034       | Forces ≤ test door, OK   |
| 10 x 21   | 10    | 69.4            | 69.4    | 203M       | 0.017   | 2034           | 2034         | Forces ≤ test door, OK   |
| 11 x 21   | 11    | 59.1            | 59.1    | 203M       | 0.017   | 2033           | 2033         | Forces ≤ test door, OK   |
| 12 x 21   | 12    | 51.2            | 51.2    | 203M       | 0.017   | 2033           | 2033         | Forces ≤ test door, OK   |
| 13 x 21   | 13    | 45.0            | 45.0    | 203M       | 0.017   | 2035           | 2035         | Forces ≤ test door, OK   |
| 14 x 21   | 14    | 40.0            | 40.0    | 203M       | 0.017   | 2035           | 2035         | Test Door  |
| 15 x 21   | 15    | 35.9            | 35.9    | 203M       | 0.017   | 2035           | 2035         | Forces ≤ test door, OK   |
| 16 x 21   | 16    | 32.4            | 32.4    | 203M       | 0.017   | 2036           | 2036         | Forces ≤ test door, OK   |
| 17 x 21   | 17    | 29.5            | 29.5    | 203M       | 0.017   | 2035           | 2035         | Forces ≤ test door, OK   |
| 18 x 21   | 18    | 27.0            | 27.0    | 203M       | 0.017   | 2036           | 2036         | Forces ≤ test door, OK   |

Design wind forces are calculated to produce catenary forces at the guides equal to or less than those calculated for the test door. This indicates that the curtain, windlocks, windlock connections, guide angles, and jamb anchorages will all be stressed to approximately the same as those in the test door, provided that the door is constructed the same for all opening widths.

