ANDERSEN CORPORATION
A-SERIES REINFORCED MULLION
ASSEMBLY

GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 5TH EDITION (2014) FLORIDA BUILDING CODE (FBC) INCLUDING MAY 2012 INTERNATIONAL BUILDING CODE & 2012 INTERNATIONAL RESIDENTIAL CODE. ALL PRODUCTS UNDER THE SCOPE OF THIS DOCUMENT HAVE BEEN EVALUATED ACCORDING TO THE 2014 FBC AND THE FOLLOWING:
   • TAS 202-94
   • TAS 203-94
   • TAS 209-94

2. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN, UNLESS OTHERWISE STATED.

3. THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION.

4. INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/2 INCH OF THE DEPICTED LOCATION IN THE ANCHOR LAYOUT DETAIL (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.

5. FOR INSTALLATION THROUGH X2 BUCK USE 9/16 WOOD SCREWS. INSTALLATION SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
   • 4.1 MINIMUM EMBEDMENT OF 1-1/2 INCHES INTO WOOD
   • 4.2 MINIMUM EDGE DISTANCE OF 1/2 INCH
   • 4.3 MINIMUM O.C. DISTANCE OF 3/4 INCH

6. FOR INSTALLATION THROUGH METAL FRAME USE #10 SELF DRILLING, SAE 6A, 6 TYP SCREWS INSTALLATION SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
   • 6.1 THREE (3) THREADS MINIMUM PENTRATION BEYOND METAL FRAME WALL
   • 6.2 MINIMUM EDGE DISTANCE OF 1/2 INCH
   • 6.3 MINIMUM O.C. DISTANCE OF 3/4 INCH

7. INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.

8. ASSEMBLY SCREWS, 1/8 X 4 SCREWS, ARE LOCATED THROUGH SPACER CLIPS (ITEM #5) AT 24 O.C.

9. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.

10. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
    • WOOD - MINIMUM SPECIFIC GRAVITY OF 0.55
    • CONCRETE - MINIMUM COMPRRESSIVE STRENGTH OF 2000 PSI
    • GRUOT-FILLED CMU - UNIT STRENGTH CONFORMS TO ASTM C-690 WITH MINIMUM COMPRRESSIVE STRENGTH OF 2000 PSI AND GRUOT CONFORMS TO ASTM C-675, MINIMUM GRUOT COMPRRESSIVE STRENGTH OF 2000 PSI.
    • HOLLOW BLOCK CMU - UNIT STRENGTH CONFORMS TO ASTM C-690 MINIMUM COMPRRESSIVE STRENGTH OF 2000 PSI.
    • STEEL - MINIMUM WALL THICKNESS OF 5/16 INCH (8.6 MM) WHEN THROUGH GROUT INSTALLATION
    • ALUMINUM - 0.032 MINIMUM THICKNESS (8063-T5)

2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASSORY, 2X AND METAL STUD FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERING APPLIED LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT FOR RECORD FOR THE PROJECT OF INSTALLATION.

3. 3X AND 2X BUCKS WHEN USED SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT FOR RECORD OF THE PROJECT OF INSTALLATION.

4. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DEPICTED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT IN NON-HVZ AREAS. IN HVZ AREAS, ONE TIME PRODUCT APPROVAL TO BE OBTAINED FROM MIAMI-DADE PERM OR AHJ.

5. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED TO PROTECT THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.

6. WINDOW/DOOR FRAME MATERIAL: PONDORSA PINE OR EQUIVALENT (K6-0.45).

7. IN ACCORDANCE WITH 2014 FBC, WOOD COMPONENTS SHALL HAVE BEEN PRESERVATIVE TREATED OR SHALL BE OF A DURABLE SPECIES.

10. IN ACCORDANCE WITH THE 2014 FBC, DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME INTO CONTACT WITH ALUMINUM UNIT FRAMING SHALL BE PROTECTED.

9. DESIGNATIONS "X" AND "Y" STAND FOR THE FOLLOWING:
    • OPERABLE PANEL
    • FIXED PANEL

11. CUSTOM SIZE AVAILABLE UPON REQUEST. CUSTOM DESIGN PRESSURE WILL BE ASSESSED EQUAL TO NEXT LARGER STANDARD SIZE.

12. MULLION ASSEMBLIES ARE QUALIFIED FOR TWO OR MORE UNITS PER OPENING IN THE FOLLOWING CONFIGURATIONS:
    • "ONE WAY" - RIBBON OR STACKED MULLIONS
    • "TWO WAY" - X OR T MULLIONS

13. GROUPS I, II, III CONSIST OF 4-15/16" MULLIONS (ITEM #1A).
    • GROUPS IV, V, VI CONSIST OF 6-9/16" MULLIONS (ITEM #1B)

MISSILE IMPACT RATING

SMALL AND LARGE
MISSILE IMPACT RATED

MISSILE IMPACT RATING

FILE#: FL15922

AWD086 SHEET: 1 OF 15
#10 x 1-1/4" FH SCREWS (SEE INSTALL. NOTE 8, SHEET 1) 4-6" FROM END & 8" MAX. O.C. THEREAFTER.

#10 x 7/8" FH SCREWS (SEE INSTALL. NOTE 8, SHEET 1) 4-6" FROM END & 8" MAX. O.C. THEREAFTER.

#10 x 7/8" FH SCREWS (SEE INSTALL. NOTE 8, SHEET 1) 4-6" FROM END & 8" MAX. O.C. THEREAFTER.

#10 x 7/8" FH SCREWS (SEE INSTALL. NOTE 8, SHEET 1) 4-6" FROM END & 8" MAX. O.C. THEREAFTER.
NOTE:
INSTALLATION DETAILS ARE APPLICABLE TO 6-9/16" REINFORCED MULLION ASSEMBLIES.

ADJACENT WINDOW FRAMES, UNDER SEPARATE APPROVAL

(8) #8 x 5/8" FH SCREWS THROUGH GUSSET TO EACH ADJACENT FRAME

(2) #10 x 2-1/4" GR. 5 FH SCREWS THROUGH GUSSET TO END PLUG

(2) #10 x 2-1/4" FH SCREWS THROUGH EA. INTERSECTION BRACKET INTO END PLUG

MIN. 1/2" EDGE DISTANCE

MIN. 1 1/2" EMBEDMENT

MIN. 3 THREADS PENETRATION

MIN. 3 THREADS PENETRATION
| L - Mull Length (ft) | 18.0 | 21.0 | 24.0 | 27.0 | 30.0 | 33.0 | 36.0 | 42.0 | 48.0 | 54.0 | 60.0 | 66.0 | 72.0 | 78.0 | 84.0 | 90.0 | 96.0 | 102.0 | 108.0 | 114.0 | 120.0 | 126.0 | 132.0 | 138.0 | 144.0 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| W - Tributary Width (in) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

**NOTE:**
1. **MULLION CHART APPLIES TO 4-3/16" (ITEM #1A) GROUP I REINFORCED COMPOSITE MULL ASSEMBLIES, WHEN MULLED IN ONE-WAY, STACK OR RIBBON, CONFIGURATIONS.
2. **DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.
3. **MAXIMUM DEFLECTION HAS BEEN LIMITED TO L/180.
4. **DESIGN PRESSURE OF ASSEMBLY IS LIMITED TO THE LESSE DESIGN PRESSURE OF THE MULLIN ASSEMBLY OR THE INDIVIDUAL UNIT OF INSTALLTION. ADJACENT WINDOWS OR DOORS SHALL BE UNDER SEPARATE FL OR MIAMI-DADE APPROVAL.
5. **MULLION CHART APPLIES TO THE FOLLOWING INSTALLATION CONDITIONS:
   - GUSSET INSTALLATION TO WOOD OR METAL STUD
   - HALF GUSSET INSTALLATION TO WOOD OR METAL STUD.
6. **TRIBUTARY WIDTH = W = (A+B)/2
7. **REFER TO SHEETS 8 & 9 FOR INSTALLATION DETAILS.
8. **WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.
NOTE:
1) MULLION CHART APPLIES TO 4-9/16" ITEM #1A GROUP II REINFORCED COMPOSITE MULL ASSEMBLIES, WHEN MULLED IN ONE-WAY, STACK OR RIBBON, CONFIGURATIONS.
2) DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.
3) MAXIMUM DEFLECTION HAS BEEN LIMITED TO L/180.
4) DESIGN PRESSURE OF ASSEMBLY IS LIMITED TO THE LESSER DESIGN PRESSURE OF THE MULLION ASSEMBLY OR THE INDIVIDUAL UNIT OF INSTALLATION. ADJACENT WINDOWS OR DOORS SHALL BE UNDER SEPARATE FL OR MIAMI-DADE APPROVAL.
5) MULLION CHART APPLIES TO THE FOLLOWING INSTALLATION CONDITIONS:
   ▶ GUSSET INSTALLATION TO WOOD OR METAL STUD
   ▶ HALF GUSSET INSTALLATION TO WOOD OR METAL STUD.
6) TRIBUTARY WIDTH = W = (A+B)/2
7) REFER TO SHEETS 8 & 9 FOR INSTALLATION DETAILS.
8) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.
NOTE:
1) MULLION CHART APPLIES TO 4-9/16" (ITEM #1A) GROUP III REINFORCED COMPOSITE MULL ASSEMBLIES, WHEN MULLED IN ONE-WAY, STACK OR RIBBON, CONFIGURATIONS.
2) DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.
3) MAXIMUM DEFLECTION HAS BEEN LIMITED TO L/180.
4) DESIGN PRESSURE OF ASSEMBLY IS LIMITED TO THE LESSER DESIGN PRESSURE OF THE MULLION ASSEMBLY OR THE INDIVIDUAL UNIT OF INSTALLATION. ADJACENT WINDOWS OR DOORS SHALL BE UNDER SEPARATE FL OR MIAMI-DADE APPROVAL.
5) MULLION CHART APPLIES TO THE FOLLOWING INSTALLATION CONDITIONS:
   - GUSSET INSTALLATION TO WOOD OR METAL STUD
   - HALF GUSSET INSTALLATION TO WOOD OR METAL STUD.
6) TRIBUTARY WIDTH = W = (A+B)/2
7) REFER TO SHEETS 8 & 9 FOR INSTALLATION DETAILS.
8) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.

A + B = W
2
### Maximum Design Pressure Capacity Chart (PSL Group L, R, or B) [Two-Way Configurations]

| L - Multi-Unit Length (in) | 18.0 | 21.0 | 24.0 | 27.0 | 30.0 | 33.0 | 36.0 | 42.0 | 48.0 | 54.0 | 60.0 | 66.0 | 72.0 | 78.0 | 84.0 | 90.0 | 96.0 | 102.0 | 108.0 | 114.0 | 120.0 | 126.0 | 132.0 | 138.0 | 144.0 |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| W - Tributary Width (in)  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 100.0                     | 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0|
| 120.0                     | 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0|
| 140.0                     | 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0| 100.0|

**Note:**
2. Design Pressure Values are Positive and Negative in PSF.
4. Design Pressure of Assembly Is Limited to the Lesser Design Pressure of the Mullion Assembly or the Individual Unit of Installation. Adjacent Windows or Doors Shall Be Under Separate Fl or Miami-DADE Approval.
5. Mullion Chart Applies to the Following Installation Conditions:
   - V-Notch Gusset Installation to Wood or Metal Stud
   - Half Gusset Installation to Wood or Metal Stud.
6. Tributary Width = W = (A+B)/2
7. Refer to Sheets 8 or 9 for Installation Details.
8. When Windows Are Stacked Vertically, the Manufacturer/Installer Shall Ensure That the Weight of Units Above Will Not Cause Deformation or Stresses Which Will Affect Operation or Structural Adequacy of Units Below.
**NOTE:**

1. MULLION CHART APPLIES TO 6-9/16" (ITEM #18) GROUP IV REINFORCED COMPOSITE MULLION ASSEMBLIES, WHEN MULLED IN ONE-WAY, STACK OR RIBBON, CONFIGURATIONS.

2. DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.

3. MAXIMUM DEFLECTION HAS BEEN LIMITED TO 1/180.

4. DESIGN PRESSURE OF ASSEMBLY IS LIMITED TO THE LESSER DESIGN PRESSURE OF THE MULLION ASSEMBLY OR THE INDIVIDUAL UNIT OF INSTALLATION. ADJACENT WINDOWS OR DOORS SHALL BE UNDER SEPARATE FI OR MIAMI-DADE APPROVAL.

5. MULLION CHART APPLIES TO THE FOLLOWING INSTALLATION CONDITIONS:
   - Gusset Installation to Wood or Metal Stud
   - Half Gusset Installation to Wood or Metal Stud

6. TRIBUTARY WIDTH = W = (A+B)/2

7. REFER TO SHEETS 8 & 9 FOR INSTALLATION DETAILS.

8. WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.
NOTE:
1) MILLION CHART APPLIES TO 6-9/16" (ITEM #18) GROUP V REINFORCED COMPOSITE MULL ASSEMBLIES, WHEN MULLED IN ONE-WAY, STACK OR RIBBON, CONFIGURATIONS.
2) DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.
3) MAXIMUM DEFLECTION HAS BEEN LIMITED TO L/180.
4) DESIGN PRESSURE OF ASSEMBLY IS LIMITED TO THE LESSER DESIGN PRESSURE OF THE MULLION ASSEMBLY OR THE INDIVIDUAL UNIT OF INSTALLATION. ADJACENT WINDOWS OR DOORS SHALL BE UNDER SEPARATE FL OR MIAMI-DADE APPROVAL.
5) MILLION CHART APPLIES TO THE FOLLOWING INSTALLATION CONDITIONS:
   • GUSSET INSTALLATION TO WOOD OR METAL STUD.
   • HALF GUSSET INSTALLATION TO WOOD OR METAL STUD.
6) TRIBUTARY WIDTH = W = (A+B)/2
7) REFER TO SHEETS 8 & 9 FOR INSTALLATION DETAILS.
8) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.
29 END PLUG
GLASS FILLED NYLON

30 UNIVERSAL GUSSET, STRAIGHT, 18
14 GA. GALVANIZED STEEL

31 END SEAL
PVC

32 HALF GUSSET, LS STILL, RS HEAD
14 GA. GALVANIZED STEEL

33 HALF GUSSET, RS STILL, LS HEAD
14 GA. GALVANIZED STEEL