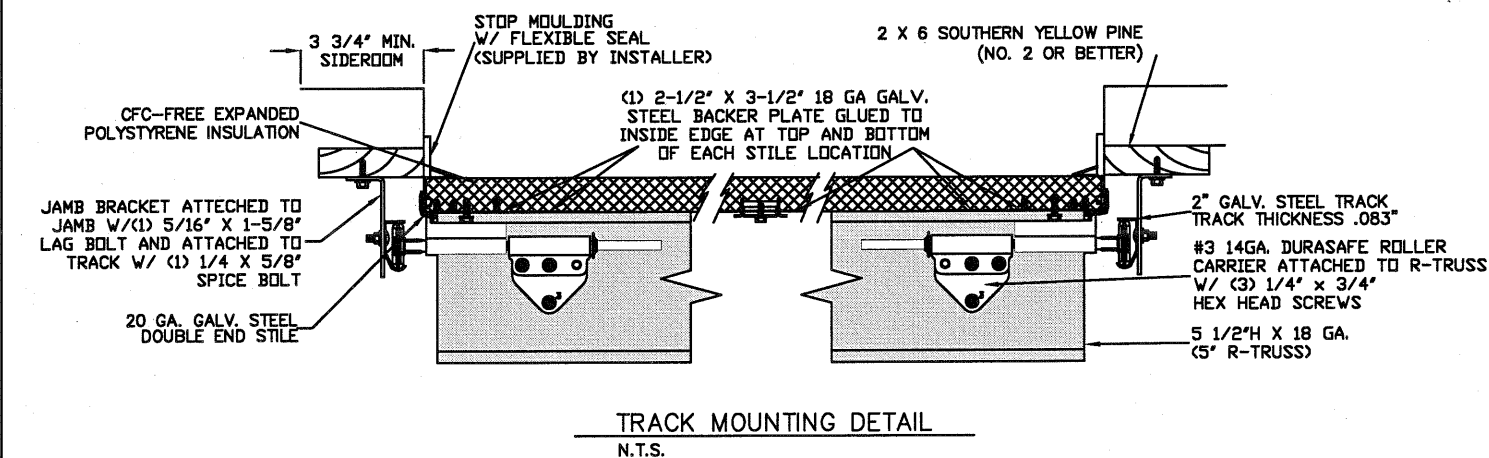
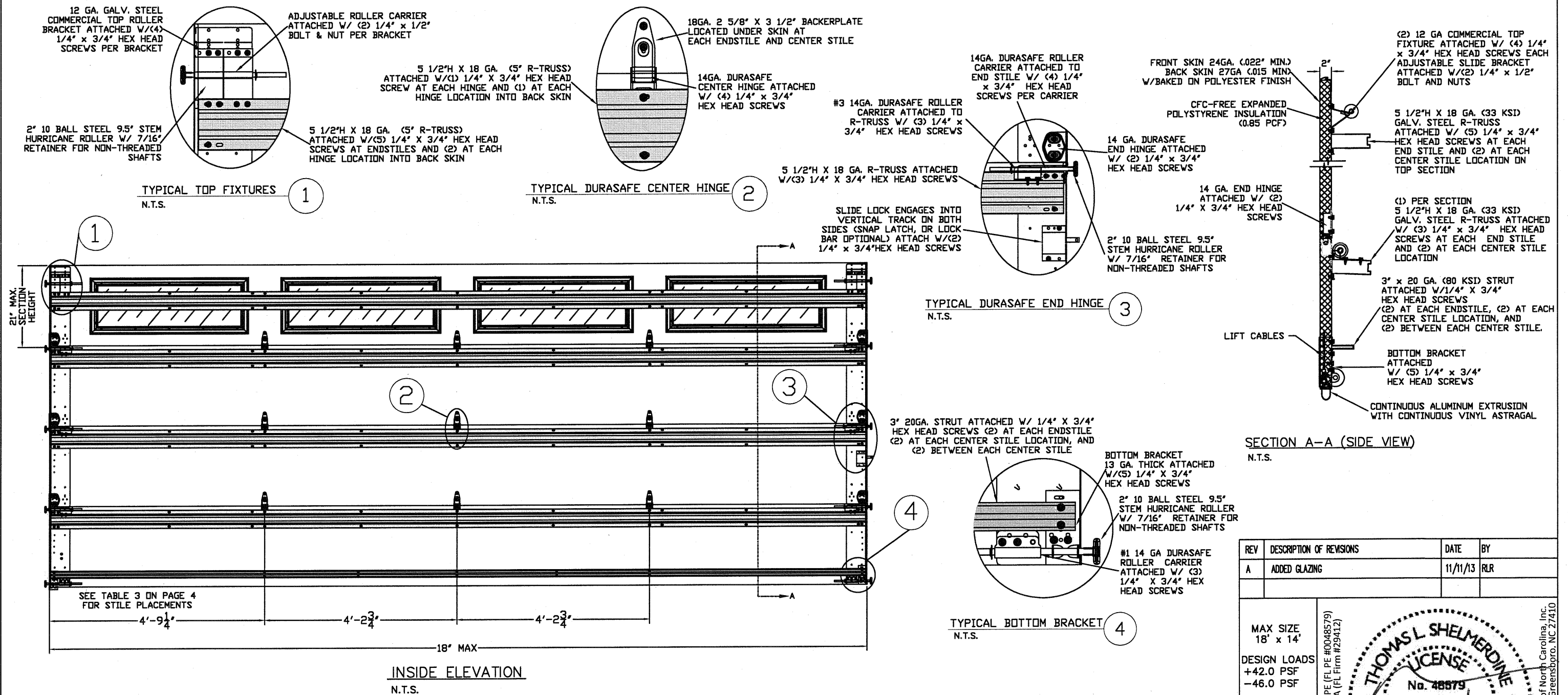




## LARGE MISSILE IMPACT RESISTANCE

THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN ASTM E330, E1886, E1996, & F588, ANSI/DASMA 108, & 115, AND TAS 201, 202, & 203. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-16 WITH THE FOLLOWING PARAMETERS (5 FEET OF DOOR WIDTH IN THE END ZONE, ROOF AT ANY SLOPE):

|                  |     |     |     |     |     |
|------------------|-----|-----|-----|-----|-----|
| WIND SPEED (MPH) | 212 | 193 | 183 | 175 | 168 |
| EXPOSURE LEVEL   | B   | C   | C   | D   | D   |
| MEAN ROOF HEIGHT | 30' | 15' | 25' | 15' | 25' |

| REV | DESCRIPTION OF REVISIONS | DATE     | BY  |
|-----|--------------------------|----------|-----|
| A   | ADDED GLAZING            | 11/11/13 | RLR |

|                                        |  |  |
|----------------------------------------|--|--|
| MAX SIZE<br>18' x 14'                  |  |  |
| DESIGN LOADS<br>+42.0 PSF<br>-46.0 PSF |  |  |
| LARGE MISSILE<br>IMPACT<br>RESISTANCE  |  |  |

Thomas L. Shelmerdine, PE (FL PE #0048579)  
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**MODEL #1200 AMARR HERITAGE 3000**  
**MODEL #1200 AMARR OAK SUMMIT 3000**  
Short, Long, Flush & Oak Summit Panels

|      |            |     |      |         |                   |
|------|------------|-----|------|---------|-------------------|
| SIZE | DRAWN BY   | SKW | DATE | 5/21/07 | DRAWING NUMBER    |
| B    | CHECKED BY | BHG | DATE | 6/07/07 | IRC-1218-165-26-1 |

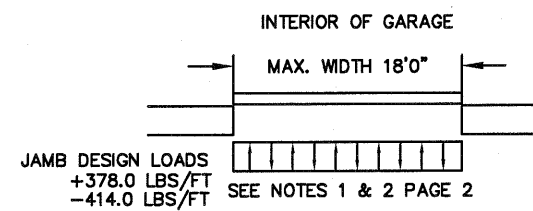
ENTREMATIC  
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

SHEET 1 OF 4

# WOOD JAMB ATTACHMENT TO STRUCTURE

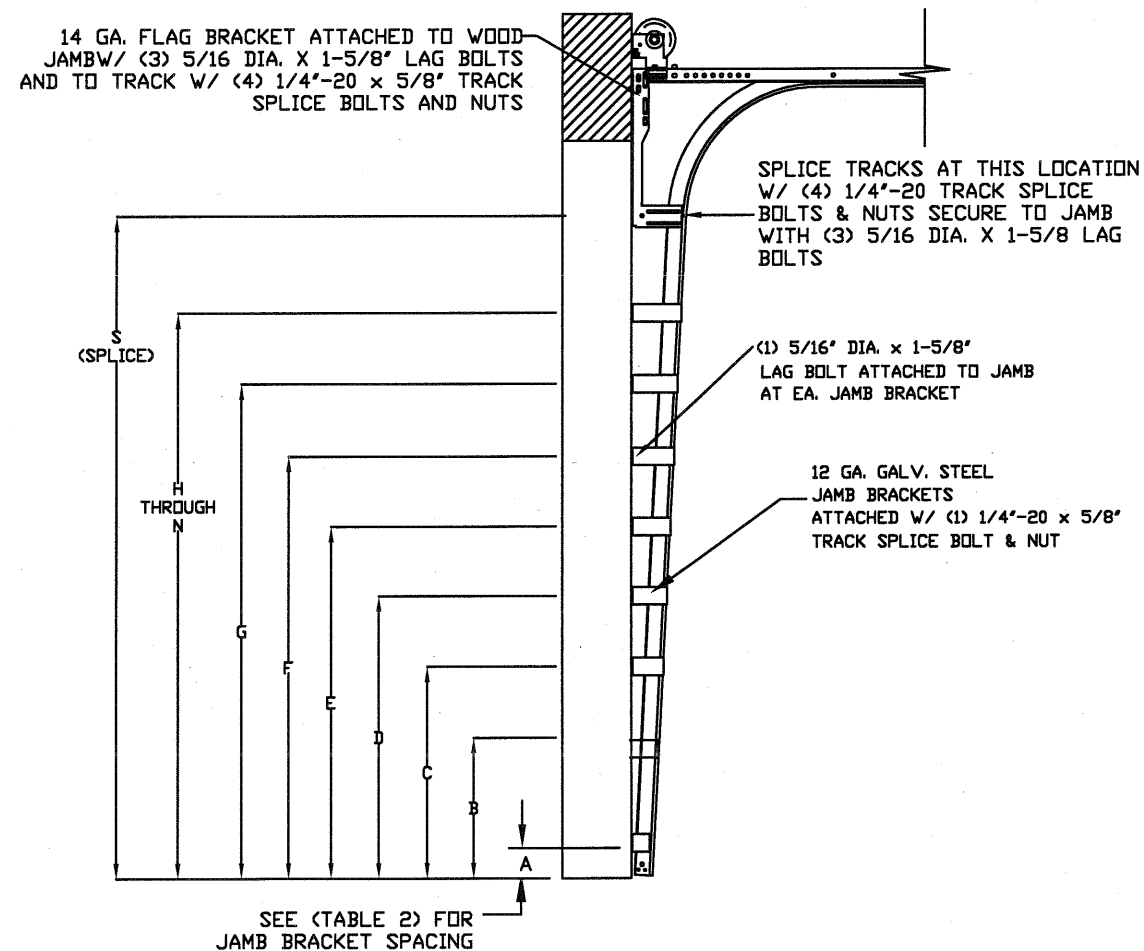
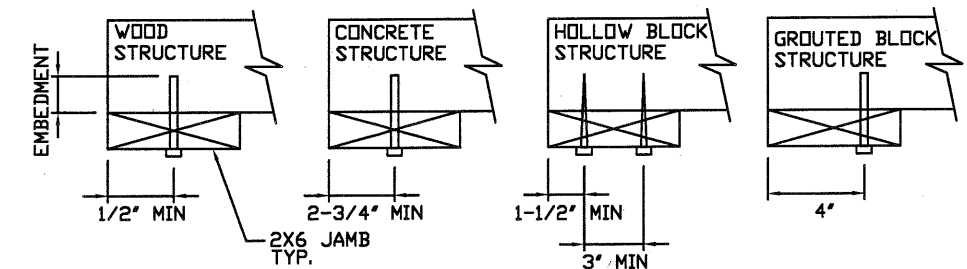
## SPECIFICATIONS AND NOTES

1. ALL THE LOAD FROM THE DOOR IS TRANSFERRED TO THE VERTICAL TRACK, FROM THE TRACK THE LOAD IS TRANSFERRED TO THE VERTICAL JAMBS. THE HORIZONTAL JAMB OR HEADER RECEIVES NO PORTION OF THE LOAD TRANSFERRED FROM THE DOOR.
2. EACH VERTICAL JAMBS RECEIVES MAXIMUM DESIGN LOADS OF: +378.0 LBS/FT & -414.0 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 24 GA. (.022) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
5. DOORS USE (1) 5.5" 18 GA R-TRUSS PER SECTION AND (1) 3" 20 GA STRUT ON THE BOTTOM SECTION.
6. DOORS OVER (4) SECTIONS REFER TO TABLE 1
7. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

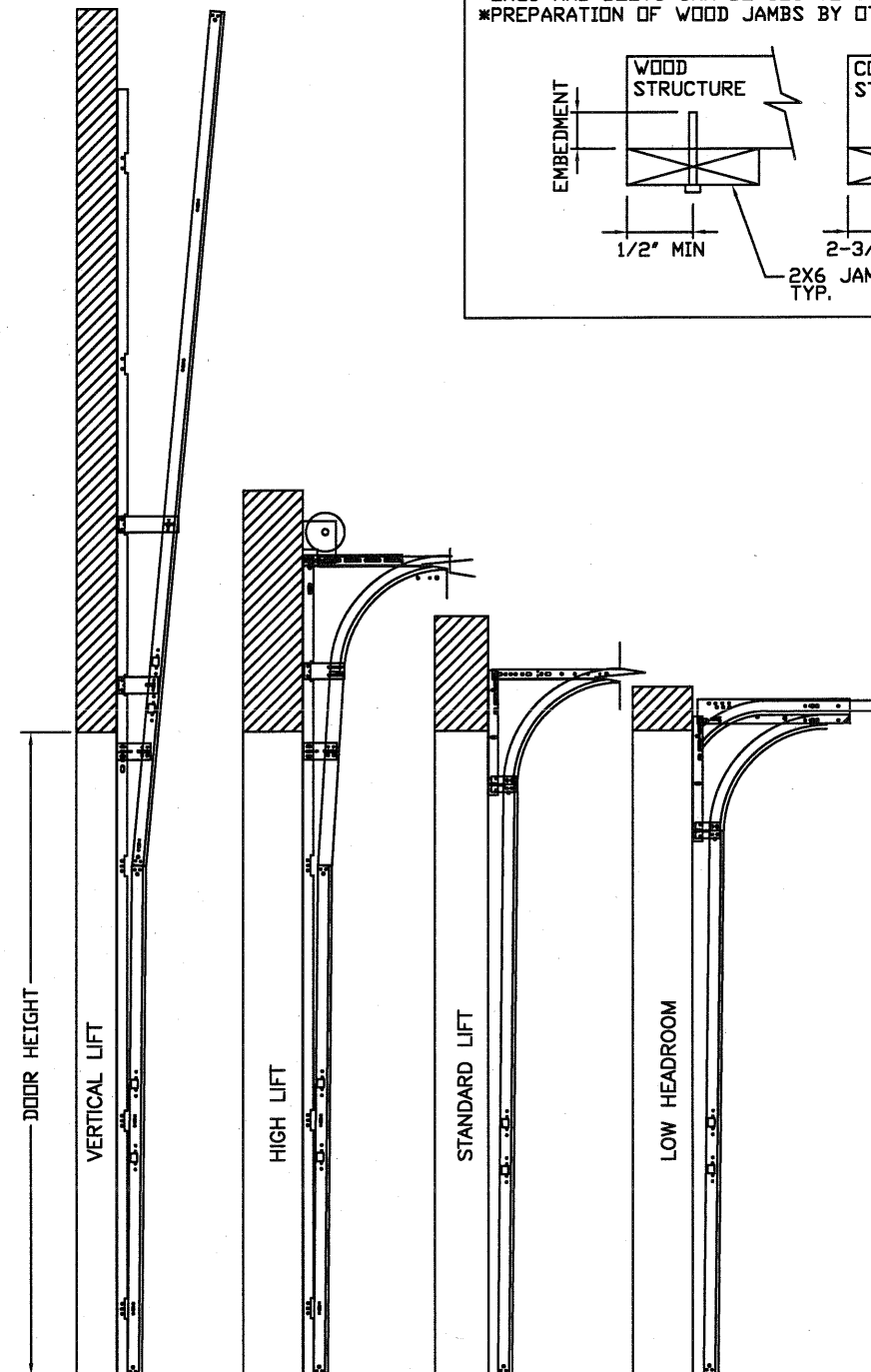


- 2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE**  
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS THEN 12" O.C. (1 1/2" EMBEDMENT)
- 2 X 6 VERTICAL JAMB ATTACHMENT TO 2,000 PSI CONCRETE**  
HILTI KWIK BOLT 3/8" X 4" STARTING 6" FROM ENDS THEN 24" O.C. (2 1/2" EMBEDMENT)  
HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS THEN 10" O.C. (1 1/4" EMBEDMENT)  
ITW/RAMSET REDHEAD (TRU-BOLT) 3/8" X 4" STARTING 6" FROM ENDS THEN 22" O.C. (2 1/2" EMBEDMENT)
- 2 X 6 VERTICAL JAMB ATTACHMENT TO HOLLOW C-90 BLOCK**  
SIMPSON 1/4" X 3" TITEN SCREWS STARTING 6" FROM ENDS, USE PAIRS OF FASTENERS (3" APART) AT 8" O.C. (1 1/2" EMBEDMENT)  
HILTI 1/4" X 2-3/4" KWIK-CON II+ SCREWS STARTING 6" FROM ENDS, USE PAIRS OF FASTENERS (3" APART) AT 8" O.C. (1 1/4" EMBEDMENT)
- 2 X 6 VERTICAL JAMB ATTACHMENT TO GROUTED C-90 BLOCK (2000 PSI GROUT)**  
HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS THEN 12" O.C. (1 1/4" EMBEDMENT) (OR, USE FASTENERS FOR HOLLOW C-90 BLOCK)

- \*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.
- \*PREPARATION OF WOOD JAMBS BY OTHERS

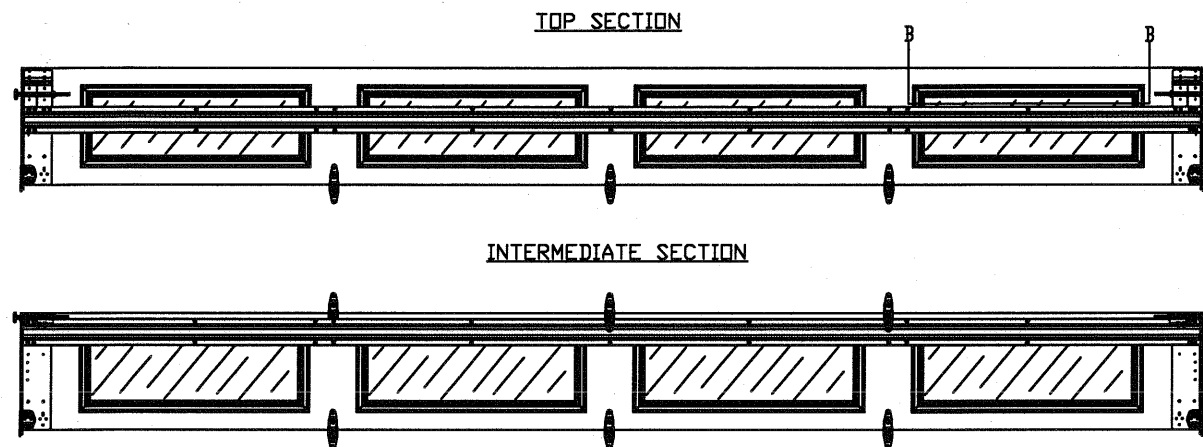


STANDARD TRACK CONFIGURATION FOR 6'6" UP TO 14' TALL DOORS  
N.T.S.

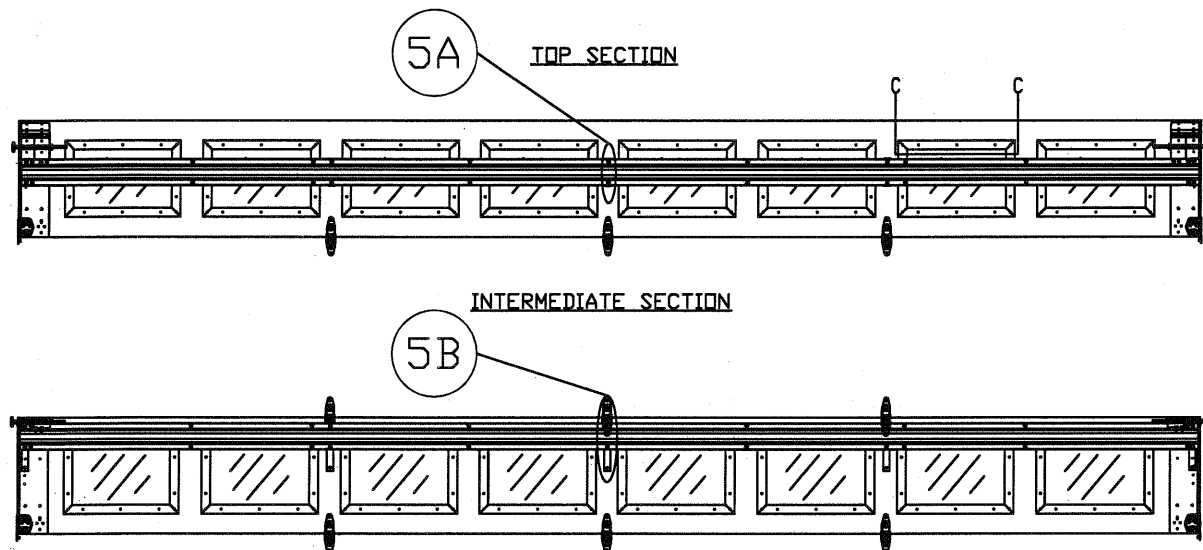


AVAILABLE TRACK CONFIGURATIONS  
N.T.S.

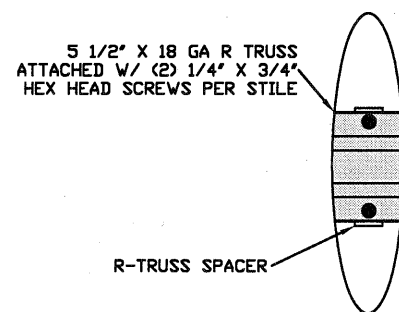
| REV                                                                                                                                                                                                                                                                                                              | DESCRIPTION OF REVISIONS | DATE         | BY                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------|-------------------|
| A                                                                                                                                                                                                                                                                                                                | ADDED GLAZING            | 11/11/13     | RLR               |
| <div> <div> MAX SIZE<br/>18' x 14'<br/>DESIGN LOADS<br/>+42.0 PSF<br/>-46.0 PSF<br/>LARGE MISSILE<br/>IMPACT<br/>RESISTANCE </div> <div> <div> THOMAS L. SHELDERDINE<br/>LICENSE<br/>No. 48679<br/>STATE OF<br/>FLORIDA<br/>PROFESSIONAL ENGINEER </div> <div> FL </div> </div> </div>                           |                          |              |                   |
| <div> <div> MODEL #1200 AMARR HERITAGE 3000<br/>MODEL #1200 AMARR OAK SUMMIT 3000<br/>Short, Long, Flush &amp; Oak Summit Panels </div> <div> <div> Amarr </div> <div> MODEL #1200 AMARR HERITAGE 3000<br/>MODEL #1200 AMARR OAK SUMMIT 3000<br/>Short, Long, Flush &amp; Oak Summit Panels </div> </div> </div> |                          |              |                   |
| SIZE                                                                                                                                                                                                                                                                                                             | DRAWN BY SKW             | DATE 5/21/07 | DRAWING NUMBER    |
| B                                                                                                                                                                                                                                                                                                                | CHECKED BY BHG           | DATE 6/07/07 | IRC-1218-165-26-1 |
| ENTREMATICS<br>165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105                                                                                                                                                                                                                                                      |                          |              | SHEET 2 OF 4      |



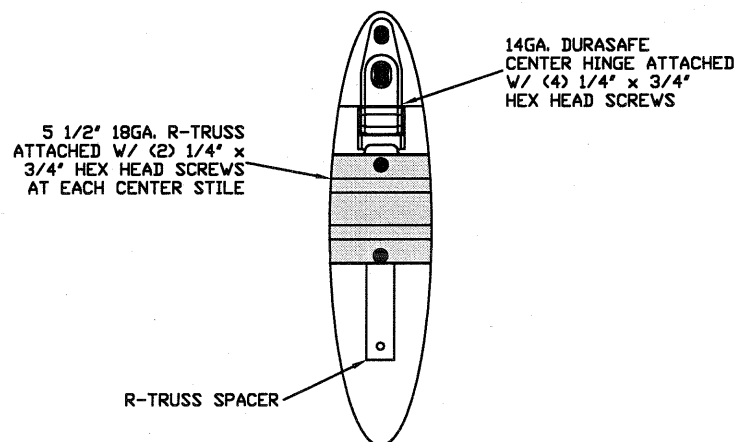
OPTIONAL LONG PANEL GLAZED SECTION R-TRUSS AND STILE LAYOUT  
N.T.S.



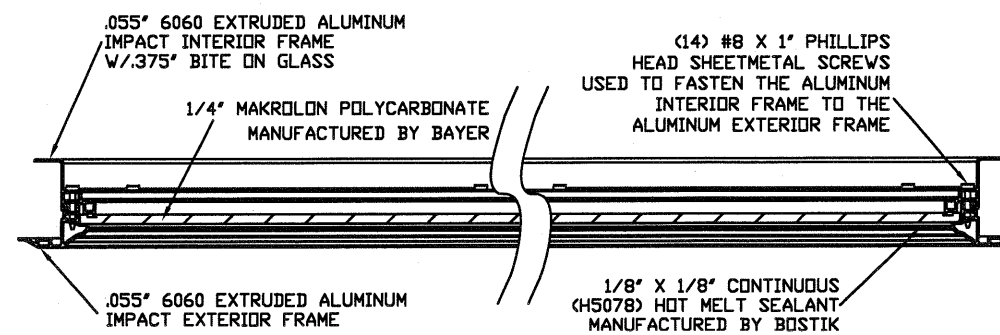
OPTIONAL SHORT PANEL GLAZED SECTION R-TRUSS AND STILE LAYOUT  
N.T.S.



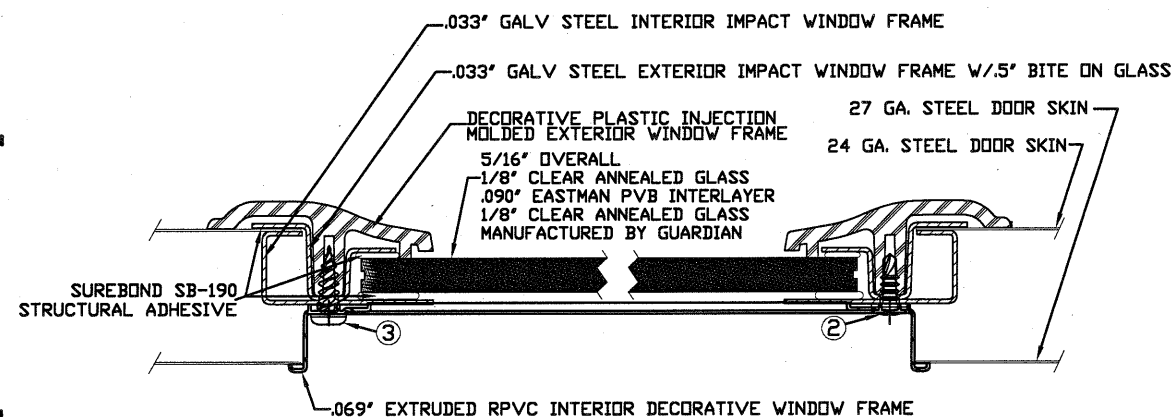
R-TRUSS SPACER  
N.T.S. 5A



R-TRUSS SPACER  
N.T.S. 5B

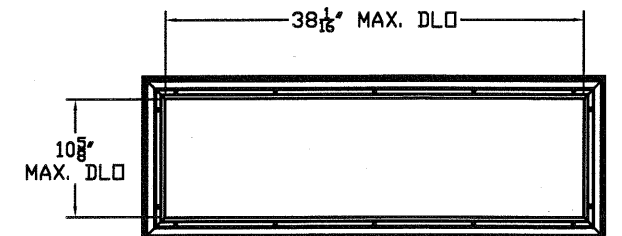


SECTION B-B IMPACT WINDOW DETAIL  
N.T.S.

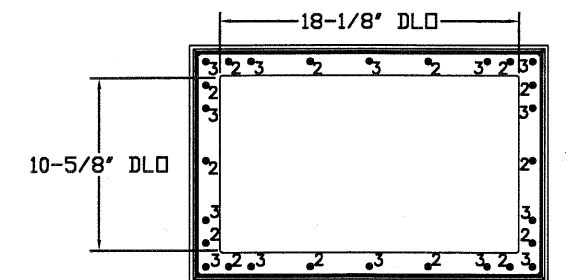


2. 3/16" X 1/2" SCREW - USED TO FASTEN THE STEEL EXTERIOR IMPACT WINDOW FRAME TO THE STEEL INTERIOR IMPACT WINDOW FRAME.
3. 11/64" X 1/2" SCREW - USED TO FASTEN DECORATIVE PLASTIC MOLDED WINDOW FRAME TO THE ASSEMBLY

SECTION C-C IMPACT WINDOW DETAIL  
N.T.S.



LONG PANEL IMPACT GLAZING FASTENER DETAIL  
N.T.S.



IMPACT GLAZING FASTENER DETAIL  
N.T.S.  
GLAZING MEETS ASTM E1300-04

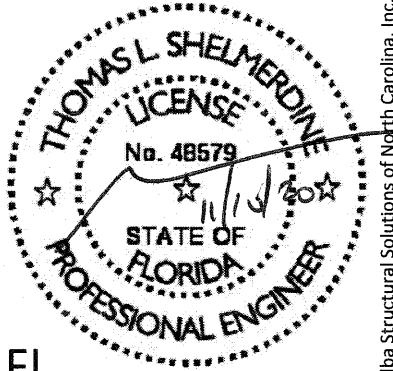
| REV | DESCRIPTION OF REVISIONS | DATE     | BY  |
|-----|--------------------------|----------|-----|
| A   | ADDED GLAZING            | 11/11/13 | RLR |

MAX SIZE,  
18' x 14'

DESIGN LOADS  
+42.0 PSF  
-46.0 PSF

LARGE MISSILE  
IMPACT  
RESISTANCE

Thomas L. Shelmerdine, PE (FL PE #0048579)  
Structural Solutions, PA (FL Firm #29412)



dba Structural Solutions of North Carolina, Inc.  
5921-G W. Friendly Ave., Greensboro, NC 27410

*Amarr*

MODEL #1200 AMARR HERITAGE 3000  
MODEL #1200 AMARR OAK SUMMIT 3000  
Short, Long, Flush & Oak Summit Panels

| SIZE                                                       | DRAWN BY   | SKW | DATE | 5/21/07 | DRAWING NUMBER    |
|------------------------------------------------------------|------------|-----|------|---------|-------------------|
| B                                                          | CHECKED BY | BHG | DATE | 6/07/07 | IRC-1218-165-26-1 |
| ENTREMATIC<br>165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105 |            |     |      |         | SHEET 3 OF 4      |

TABLE 1

| DOOR<br>HEIGHT | SECTION HEIGHTS |     |     |     |     |     |     |     |
|----------------|-----------------|-----|-----|-----|-----|-----|-----|-----|
|                | Btm             | #2  | #3  | #4  | #5  | #6  | #7  | #8  |
| 14' 0"         | 21"             | 21" | 21" | 21" | 21" | 21" | 21" | 21" |
| 13' 6"         | 21"             | 21" | 21" | 21" | 21" | 18" | 18" | 21" |
| 13' 0"         | 21"             | 21" | 21" | 18" | 18" | 18" | 18" | 21" |
| 12' 6"         | 21"             | 18" | 18" | 18" | 18" | 18" | 18" | 21" |
| 12' 0"         | 21"             | 21" | 21" | 21" | 21" | 18" | 21" |     |
| 11' 6"         | 21"             | 21" | 21" | 18" | 18" | 18" | 21" |     |
| 11' 0"         | 21"             | 18" | 18" | 18" | 18" | 18" | 21" |     |
| 10' 6"         | 21"             | 21" | 21" | 21" | 21" | 21" |     |     |
| 10' 0"         | 21"             | 21" | 21" | 18" | 18" | 21" |     |     |
| 9' 6"          | 21"             | 18" | 18" | 18" | 18" | 21" |     |     |
| 9' 0"          | 18"             | 18" | 18" | 18" | 18" | 18" |     |     |
| 8' 6"          | 21"             | 21" | 21" | 18" | 21" |     |     |     |
| 8' 0"          | 21"             | 18" | 18" | 18" | 21" |     |     |     |
| 7' 6"          | 18"             | 18" | 18" | 18" | 18" |     |     |     |
| 7' 0"          | 21"             | 21" | 21" | 21" |     |     |     |     |
| 6' 6"          | 21"             | 18" | 18" | 21" |     |     |     |     |

TABLE 2

| DOOR<br>HEIGHT | TRACK ATTACHMENT |     |     |     |     |     |     |     |     |      |      |      |      |      | SPLICE<br>S |
|----------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|-------------|
|                | A                | B   | C   | D   | E   | F   | G   | H   | I   | J    | K    | L    | M    | N    |             |
| 6' 6"          | 3"               | 14" | 27" | 38" | 46" | 56" | 64" |     |     |      |      |      |      |      | 70"         |
| 7'             | 3"               | 14" | 27" | 38" | 46" | 56" | 68" |     |     |      |      |      |      |      | 76"         |
| 7' 6"          | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" |     |      |      |      |      |      | 82"         |
| 8'             | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" |     |      |      |      |      |      | 88"         |
| 8' 6"          | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" | 88" |      |      |      |      |      | 94"         |
| 9'             | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" | 88" |      |      |      |      |      | 100"        |
| 9' 6"          | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" | 88" | 98"  |      |      |      |      | 106"        |
| 10'            | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" | 88" | 100" |      |      |      |      | 112"        |
| 10' 6"         | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" | 88" | 100" | 110" |      |      |      | 118"        |
| 11'            | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" | 88" | 100" | 110" |      |      |      | 124"        |
| 11' 6"         | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" | 88" | 100" | 110" | 120" |      |      | 130"        |
| 12'            | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" | 88" | 100" | 110" | 122" |      |      | 136"        |
| 12' 6"         | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" | 88" | 100" | 109" | 122" | 132" |      | 142"        |
| 13'            | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" | 88" | 100" | 114" | 122" | 134" |      | 148"        |
| 13' 6"         | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" | 88" | 100" | 109" | 122" | 134" | 144" | 154"        |
| 14'            | 3"               | 14" | 27" | 38" | 46" | 56" | 68" | 78" | 88" | 100" | 114" | 122" | 134" | 146" | 160"        |

ALL TRACK ATTACHMENT SPACING +/-2" ALLOWED WITH SYP NO. 2 OR BETTER ONLY

TABLE 3

| Section<br>Width<br>(ft) | Panel Type | Center Stile Locations<br>(Measured from Left Edge) |             |             | Max Design Loads<br>Allowed |                   |
|--------------------------|------------|-----------------------------------------------------|-------------|-------------|-----------------------------|-------------------|
|                          |            | 1st<br>(in)                                         | 2st<br>(in) | 3rd<br>(in) | Positive<br>(PSF)           | Negative<br>(PSF) |
| 16' 2                    | Short      | 50.272                                              | 97.000      | 143.728     | 46.5                        | 51.0              |
| 16' 2                    | Long       | 51.168                                              | 97.000      | 142.834     | 46.5                        | 51.0              |
| 16' 4                    | Short      | 51.272                                              | 98.000      | 144.728     | 46.1                        | 50.4              |
| 16' 4                    | Long       | 52.168                                              | 98.000      | 143.834     | 46.1                        | 50.4              |
| 16' 6                    | Short      | 52.272                                              | 99.000      | 145.728     | 45.6                        | 49.9              |
| 16' 6                    | Long       | 51.340                                              | 99.000      | 146.660     | 45.6                        | 49.9              |
| 16' 8                    | Short      | 51.340                                              | 100.000     | 148.660     | 45.1                        | 49.4              |
| 16' 8                    | Long       | 52.200                                              | 100.000     | 147.800     | 44.9                        | 49.2              |
| 16' 10                   | Short      | 51.500                                              | 101.000     | 150.500     | 44.7                        | 48.9              |
| 16' 10                   | Long       | 53.200                                              | 101.000     | 148.800     | 44.6                        | 48.8              |
| 17' 0                    | Short      | 53.340                                              | 102.000     | 150.660     | 44.0                        | 48.2              |
| 17' 0                    | Long       | 54.200                                              | 102.000     | 149.800     | 44.2                        | 48.5              |
| 17' 2                    | Short      | 53.000                                              | 103.000     | 153.000     | 43.8                        | 48.0              |
| 17' 2                    | Long       | 55.200                                              | 103.000     | 150.800     | 43.8                        | 48.0              |
| 17' 4                    | Short      | 54.000                                              | 104.000     | 154.000     | 43.4                        | 47.5              |
| 17' 4                    | Long       | 56.200                                              | 104.000     | 151.800     | 43.4                        | 47.5              |
| 17' 6                    | Short      | 55.000                                              | 105.000     | 155.000     | 42.8                        | 46.9              |
| 17' 6                    | Long       | 57.200                                              | 105.000     | 152.800     | 43.0                        | 47.1              |
| 17' 8                    | Short      | 54.800                                              | 106.000     | 157.200     | 42.2                        | 46.2              |
| 17' 8                    | Long       | 55.800                                              | 106.000     | 156.200     | 42.5                        | 46.5              |
| 17' 10                   | Short      | 55.800                                              | 107.000     | 158.200     | 41.9                        | 45.9              |
| 17' 10                   | Long       | 56.250                                              | 107.000     | 157.750     | 42.1                        | 46.1              |
| 18' 0                    | Short      | 57.250                                              | 108.000     | 158.750     | 42.0                        | 46.0              |
| 18' 0                    | Long       | 57.800                                              | 108.000     | 158.200     | 42.0                        | 46.0              |

|                                                                                                                                          |                          |                                                                                                                                                                                                                                                                                                                                                            |                   |
|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| REV                                                                                                                                      | DESCRIPTION OF REVISIONS | DATE                                                                                                                                                                                                                                                                                                                                                       | BY                |
| A                                                                                                                                        | ADDED GLAZING            | 11/11/13                                                                                                                                                                                                                                                                                                                                                   | RLR               |
|                                                                                                                                          |                          |                                                                                                                                                                                                                                                                                                                                                            |                   |
| <div>MAX SIZE<br/>18' x 14'</div> <div>DESIGN LOADS<br/>+42.0 PSF<br/>-46.0 PSF</div> <div>LARGE MISSILE<br/>IMPACT<br/>RESISTANCE</div> |                          | <div>Thomas L. Shelmerdine, PE (FL PE #0048579)<br/>Structural Solutions, PA (FL Firm #29412)</div> <div>FL</div> <div>Thomas L. Shelmerdine<br/>LICENSE<br/>No. 48579<br/>11/10/13<br/>STATE OF<br/>FLORIDA<br/>PROFESSIONAL ENGINEER</div> <div>dba Structural Solutions of North Carolina, Inc.<br/>5921-G W. Friendly Ave., Greensboro, NC 27410</div> |                   |
| <div>Amarr</div>                                                                                                                         |                          |                                                                                                                                                                                                                                                                                                                                                            |                   |
| <div>MODEL #1200 AMARR HERITAGE 3000<br/>MODEL #1200 AMARR OAK SUMMIT 3000<br/>Short, Long, Flush &amp; Oak Summit Panels</div>          |                          |                                                                                                                                                                                                                                                                                                                                                            |                   |
| SIZE                                                                                                                                     | DRAWN BY SKW             | DATE 5/21/07                                                                                                                                                                                                                                                                                                                                               | DRAWING NUMBER    |
| B                                                                                                                                        | CHECKED BY BHG           | DATE 6/07/07                                                                                                                                                                                                                                                                                                                                               | IRC-1218-165-26-1 |
| ENTREMATIC<br>165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105                                                                               |                          |                                                                                                                                                                                                                                                                                                                                                            | SHEET 4 OF 4      |