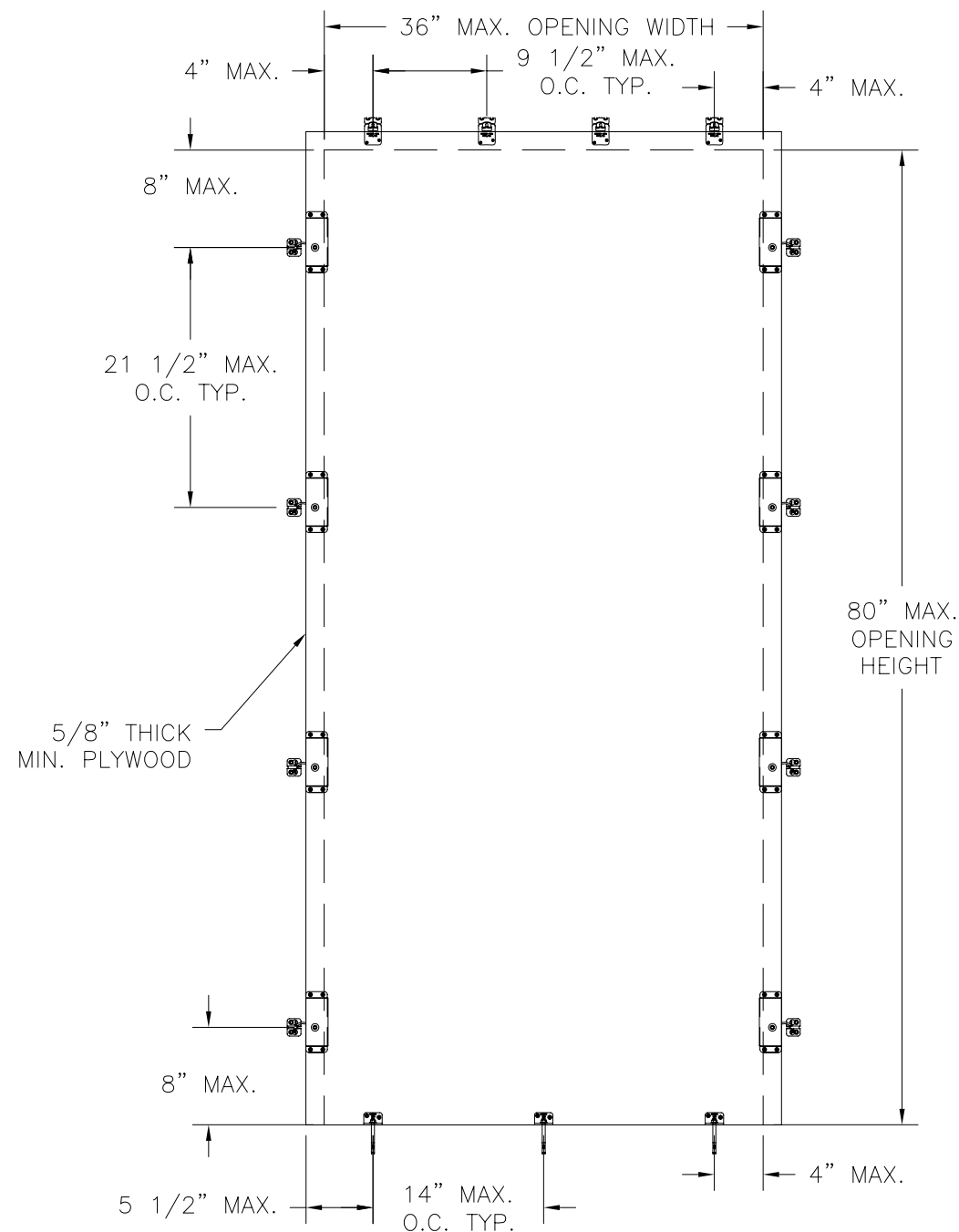


| REVISIONS | | | |
|-----------|---------------------------------|----------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| A | REVISED SYSTEM AND NOTES | 06/24/11 | R.L. |
| B | ADDED SILL INSTALLATION OPTIONS | 07/26/11 | R.L. |



**HURRICANE SHUTTER SYSTEM
SINGLE SURFACE MOUNT HARDWARE
EXTERIOR VIEW**

| DESIGN PRESSURE RATING | IMPACT RATING |
|------------------------|--------------------------------|
| ±45PSF | LARGE AND SMALL MISSILE IMPACT |

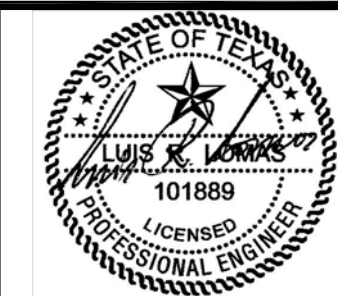
NOTES:

- 1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE 2006 INTERNATIONAL BUILDING CODE AND 2006 INTERNATIONAL RESIDENTIAL CODE WITH TEXAS STATE MODIFICATIONS.
- 2) WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 3) ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
- 4) MATERIAL: ALL COMPONENTS ARE FORMED STEEL. SEE COMPONENTS SHEET 2 FOR GRADE AND THICKNESS.
- 5) SHUTTER PANEL MUST HAVE A 1" MINIMUM SEPARATION FROM EXISTING GLASS.
- 6) FOR ANCHORING RECEIVER OR HOOK INTO GROUT FILLED HOLLOW BLOCK/CONCRETE USE 3/16" ITW TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 7) FOR ANCHORING BOTTOM STOP INTO CONCRETE USE 1/4" ITW TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 8) FOR ANCHORING RECEIVER OR HOOK INTO 2X WOOD FRAMING USE #10 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 9) FOR ANCHORING BOTTOM STOP INTO 2X WOOD FRAMING USE 1/4" LAG SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 10) FOR ANCHORING HANGER, BOTTOM STOP OR TOP AND BOTTOM LATCH INTO WOOD SHUTTER SYSTEM (5/8" THICK MINIMUM), USE #10 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 5/8" MINIMUM EMBEDMENT INTO PANEL. CENTER LATCHES USE #10 MACHINE SCREW WITH NUT AND WASHERS. MACHINE SCREW MUST ACHIEVE 3-THREADS BEYOND NUT MINIMUM ENGAGEMENT. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 11) ALL FASTENERS TO BE CORROSION RESISTANT.
- 12) 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 BELOW:
 - A. WOOD - MINIMUM SPECIFIC GRAVITY OF G=0.42
 - B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
 - C. MASONRY - GROUT FILLED HOLLOW BLOCK.

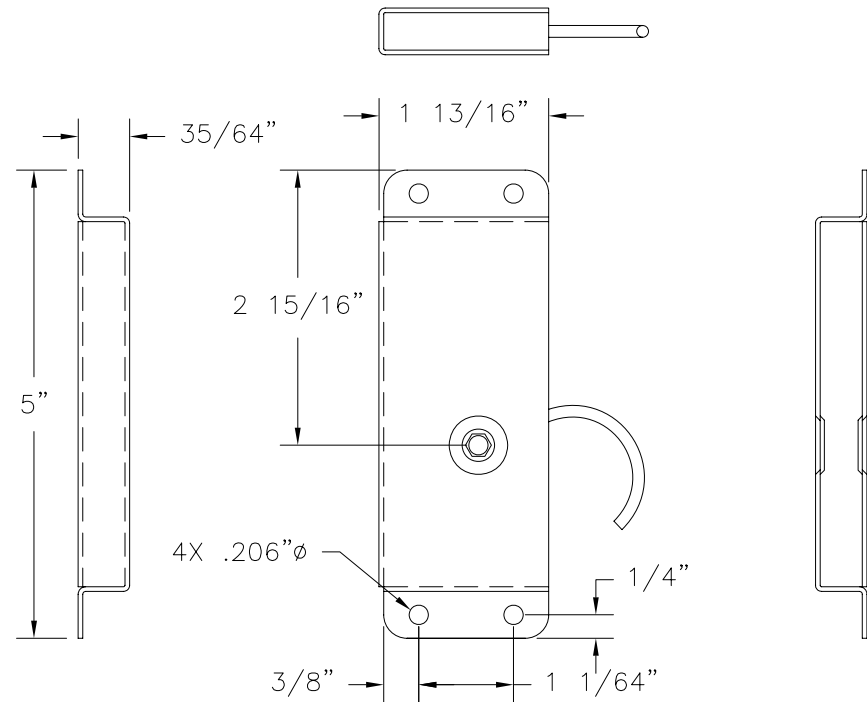
| TABLE OF CONTENTS | |
|-------------------|--------------------------------|
| SHEET NO. | DESCRIPTION |
| 1 | ELEVATION, ANCHORING AND NOTES |
| 2 | COMPONENTS |
| 3 - 4 | INSTALLATION DETAILS |

| | | |
|--|---------------------|--------------|
| NORSE, INC. 100 SOUTH ROAD TORRINGTON, CT 06790 | | |
| HURRICANE SHUTTER SYSTEM SINGLE SURFACE MOUNT HARDWARE - IMPACT ELEVATION, ANCHORING LAYOUT AND NOTES | | |
| DRAWN: TJH | DWG NO. 08-01225 | REV B |
| SCALE NTS | DATE 03/22/11 | SHEET 1 OF 4 |

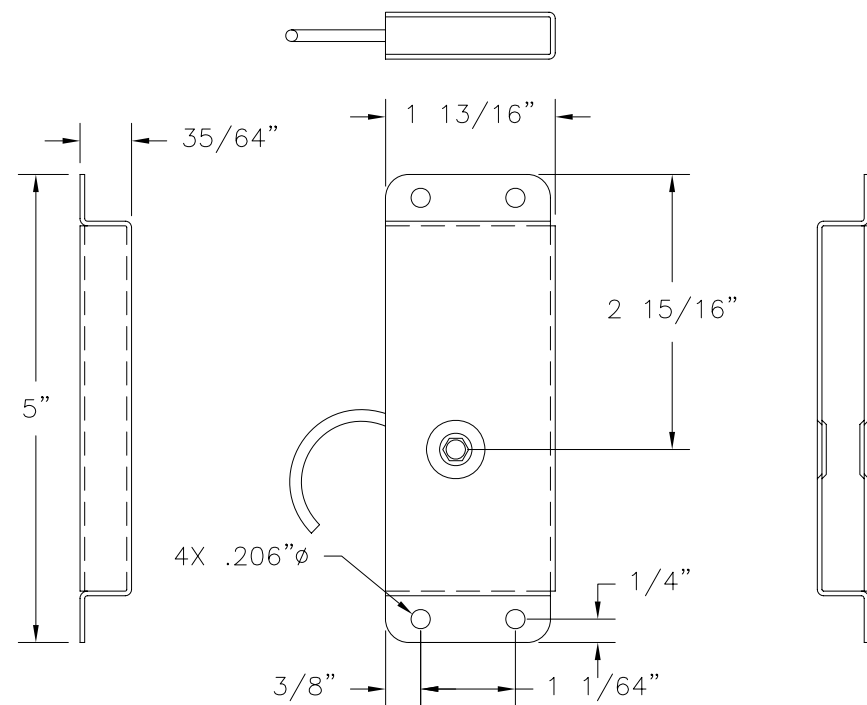
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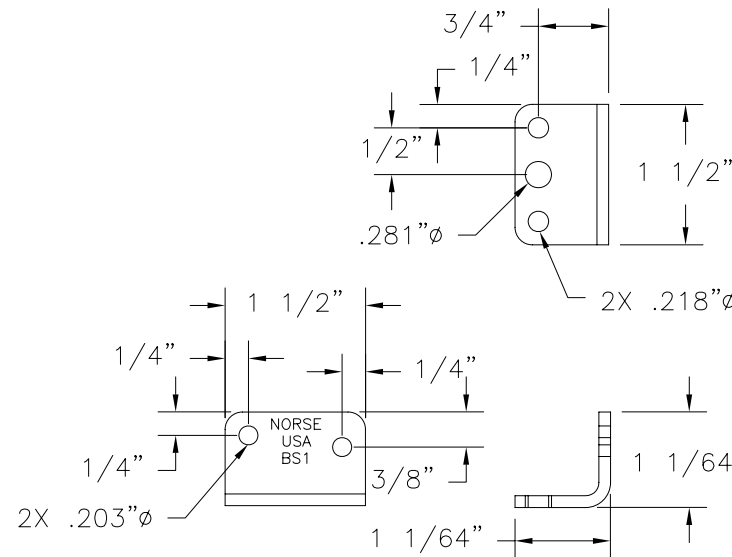
Luis R. Lomas P.E.
Texas No. 101889



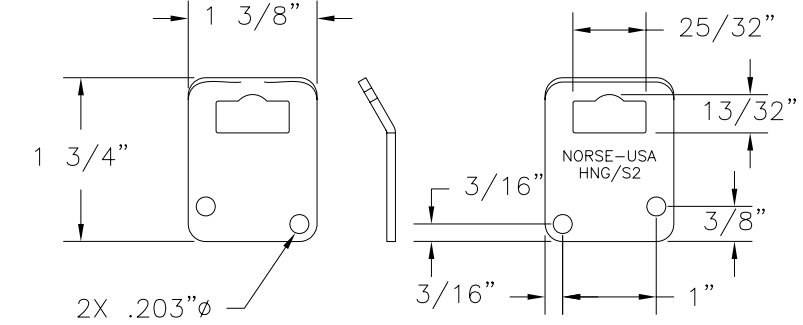
LATCH RH-S1500-1R-750
FORMED C1008, C1010 OR C1018 STEEL
ZINC PLATED .050" THICK



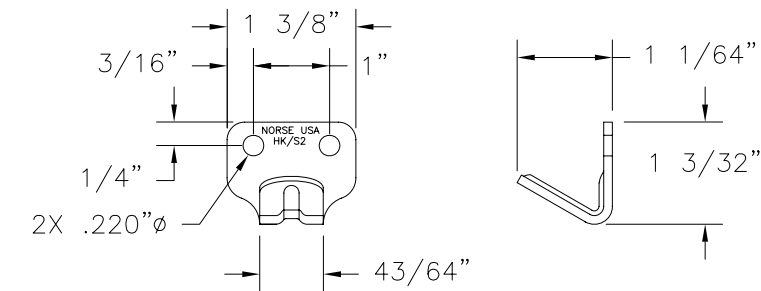
LATCH LH-S1500-1L-750
FORMED C1008, C1010 OR C1018 STEEL
ZINC PLATED .050" THICK



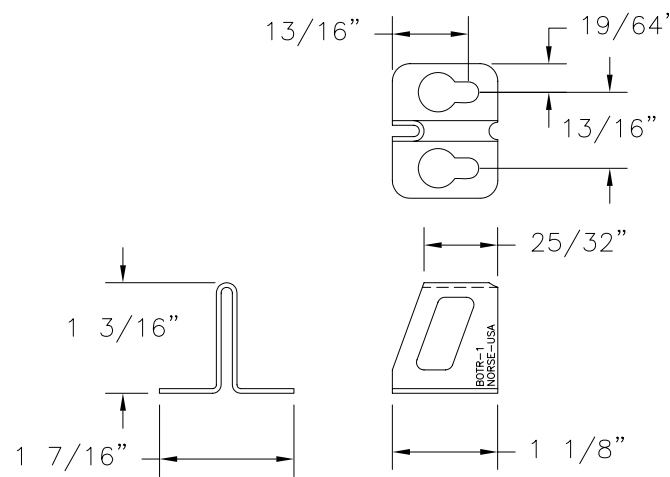
BOTTOM BRACE BB1
FORMED C1050 STEEL
ZINC PLATED .125" THICK



HANGER - SHUTTER HNG/S2
FORMED C1050 STEEL
ZINC PLATED .093" THICK



HOOK - SHUTTER HK/S2
FORMED C1050 STEEL
ZINC PLATED .093" THICK



BIG RECEIVER BOTR-1
FORMED C1050 STEEL
ZINC PLATED .050" THICK

| REVISIONS | | | |
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NORSE, INC.
100 SOUTH ROAD
TORRINGTON, CT 06790

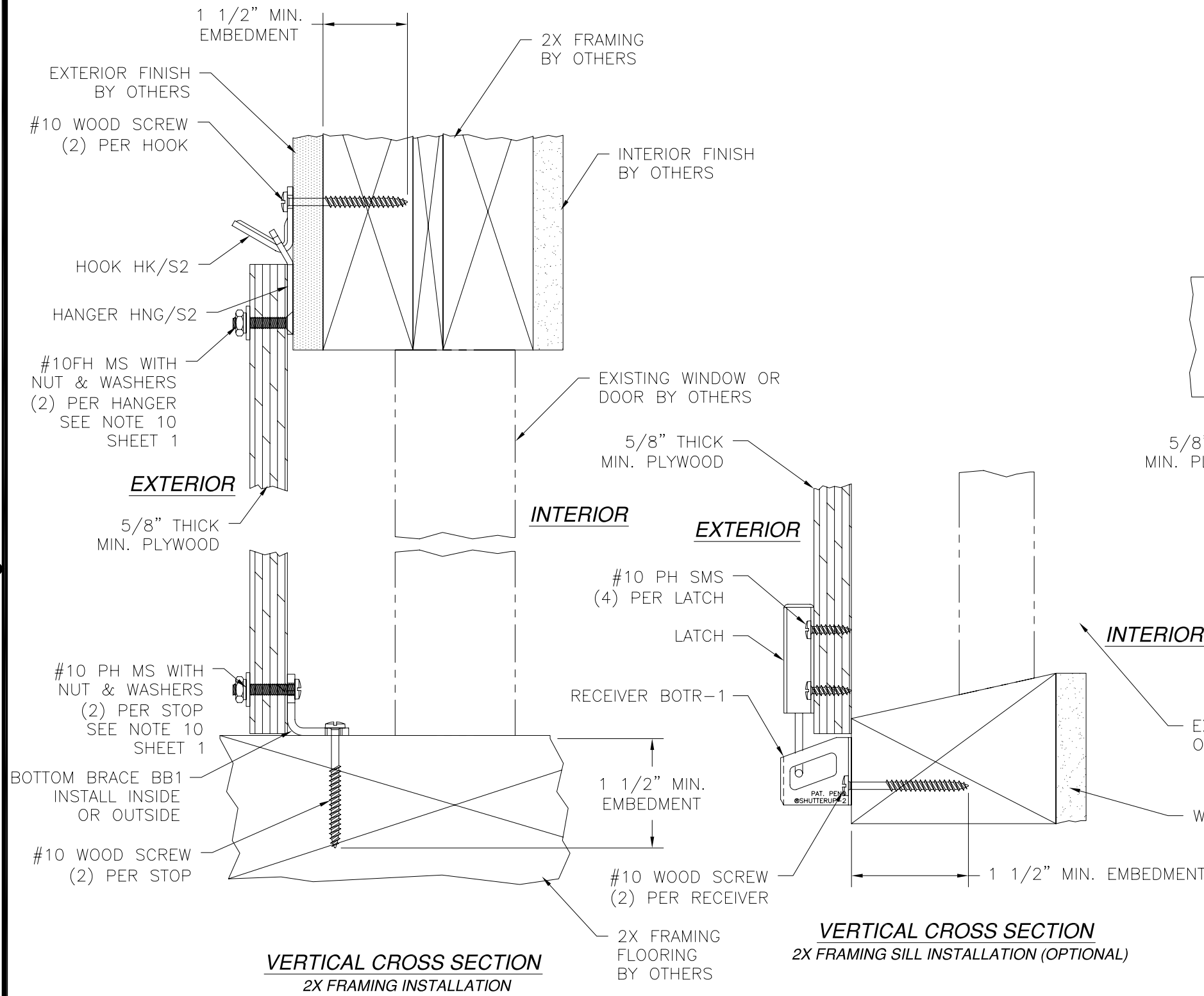
HURRICANE SHUTTER SYSTEM
SINGLE SURFACE MOUNT HARDWARE – IMPACT
COMPONENTS

| | | |
|---------------|---------------------|--------------|
| DRAWN: TJH | DWG NO. 08-01225 | REV B |
| SCALE NTS | DATE 03/22/11 | SHEET 2 OF 4 |



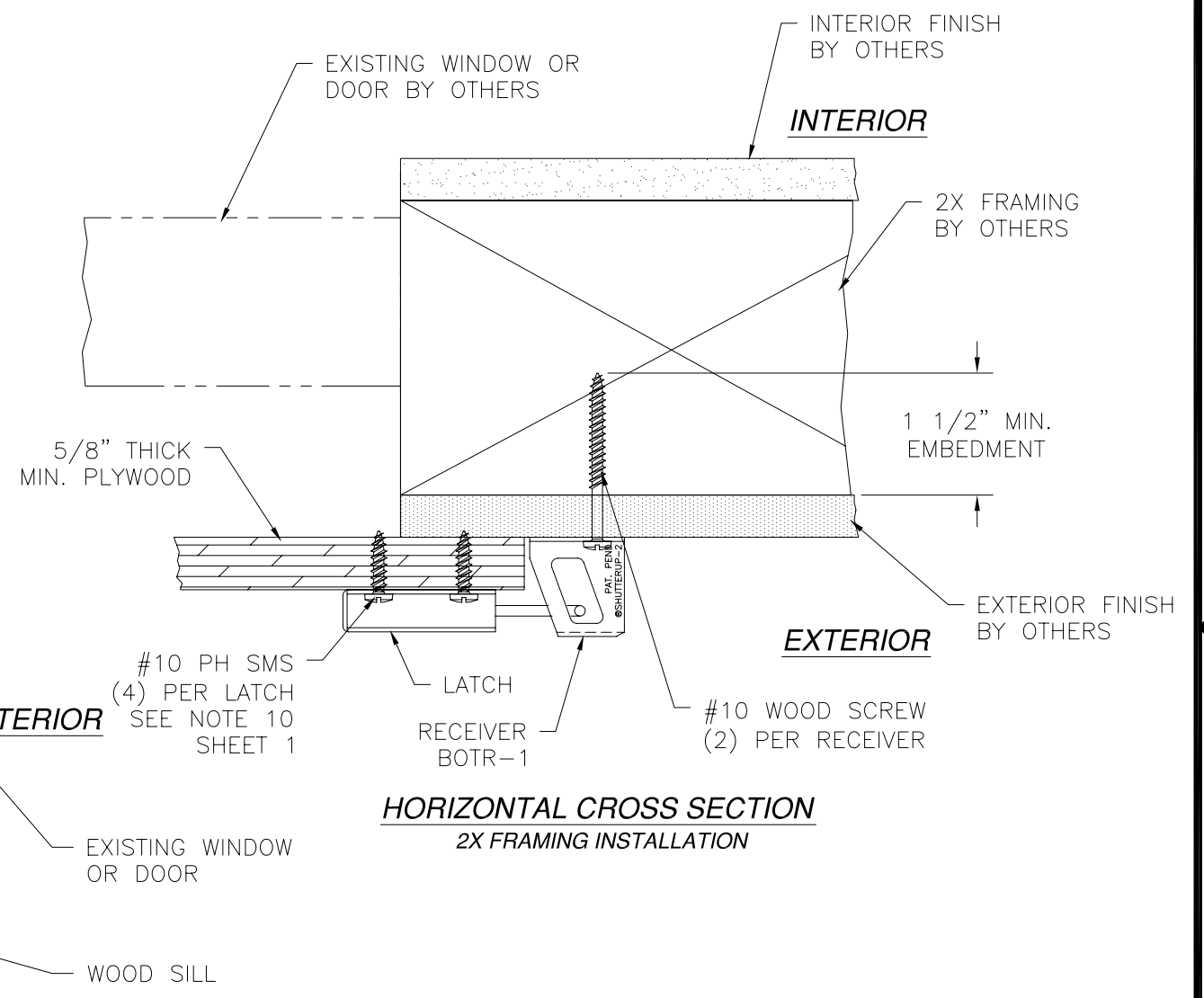
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VERTICAL CROSS SECTION
2X FRAMING INSTALLATION

VERTICAL CROSS SECTION
2X FRAMING SILL INSTALLATION (OPTIONAL)



HORIZONTAL CROSS SECTION
2X FRAMING INSTALLATION

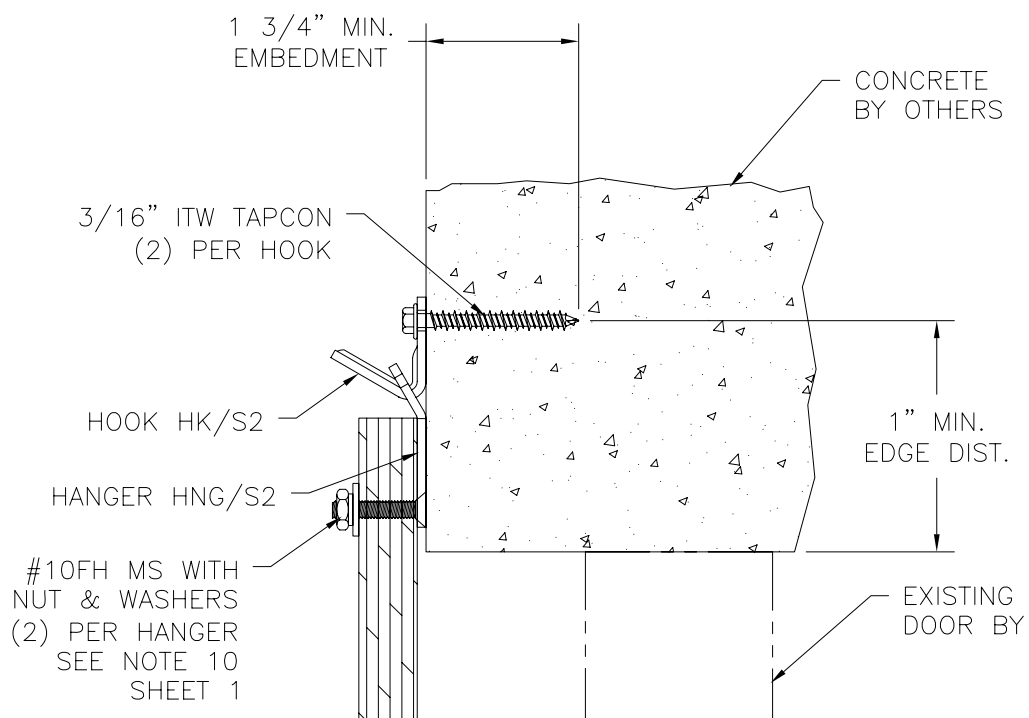
NORSE, INC.
100 SOUTH ROAD
TORRINGTON, CT 06790

HURRICANE SHUTTER SYSTEM
SINGLE SURFACE MOUNT HARDWARE – IMPACT
INSTALLATION DETAILS

| | | |
|---------------|---------------------|--------------|
| DRAWN: TJH | DWG NO. 08-01225 | REV B |
| SCALE NTS | DATE 03/22/11 | SHEET 3 OF 4 |

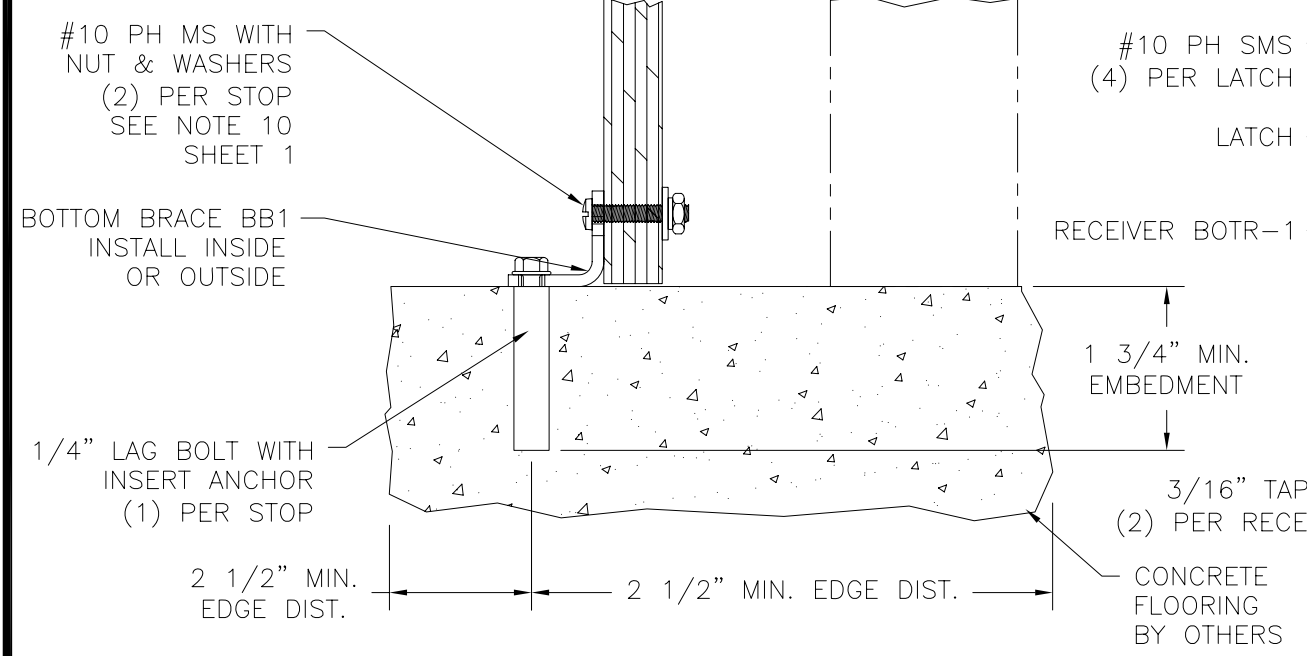
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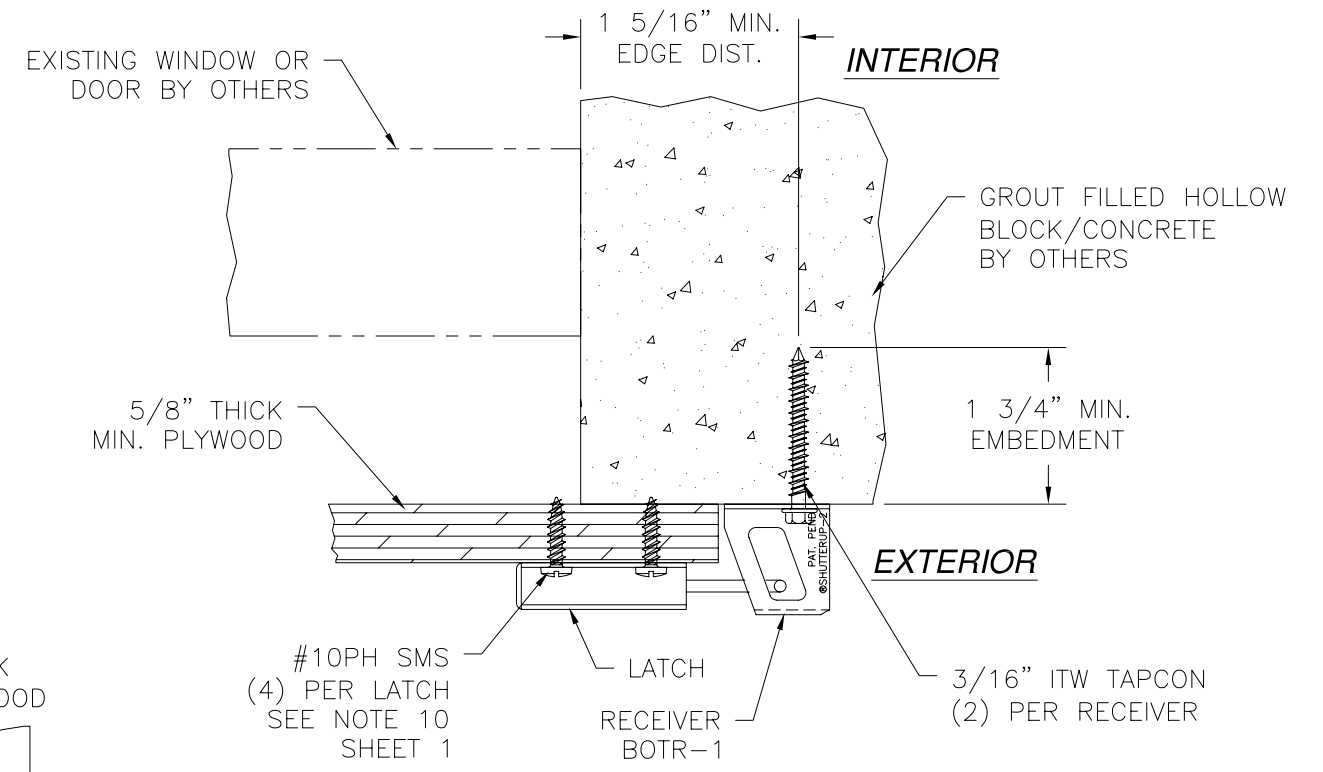


EXTERIOR

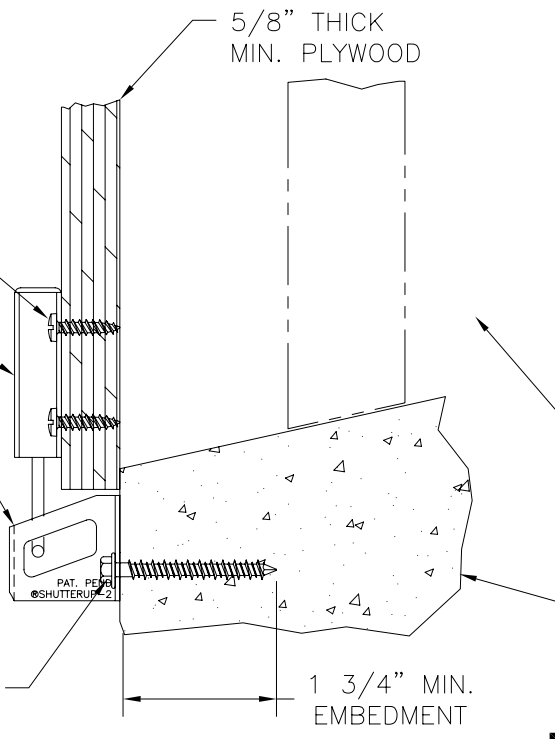
INTERIOR



**VERTICAL CROSS SECTION
CONCRETE INSTALLATION**



**HORIZONTAL CROSS SECTION
GROUT FILLED HOLLOW BLOCK/CONCRETE INSTALLATION**



**VERTICAL CROSS SECTION
MASONRY SILL INSTALLATION (OPTIONAL)**

NORSE, INC.
100 SOUTH ROAD
TORRINGTON, CT 06790

HURRICANE SHUTTER SYSTEM
SINGLE SURFACE MOUNT HARDWARE – IMPACT
INSTALLATION DETAILS

| | | |
|---------------|---------------------|--------------|
| DRAWN: TJH | DWG NO. 08-01225 | REV B |
| SCALE NTS | DATE 03/22/11 | SHEET 4 OF 4 |

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