

# Construction Details



## *Induction Welded Systems*

Revised 07/17/15



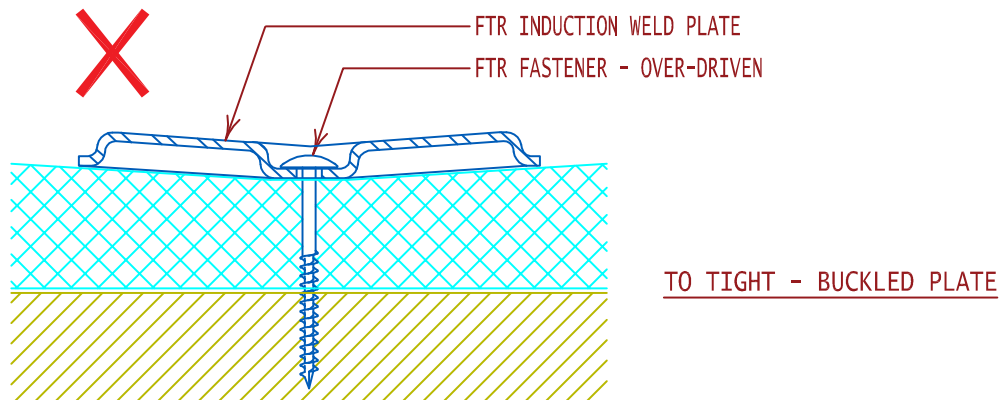
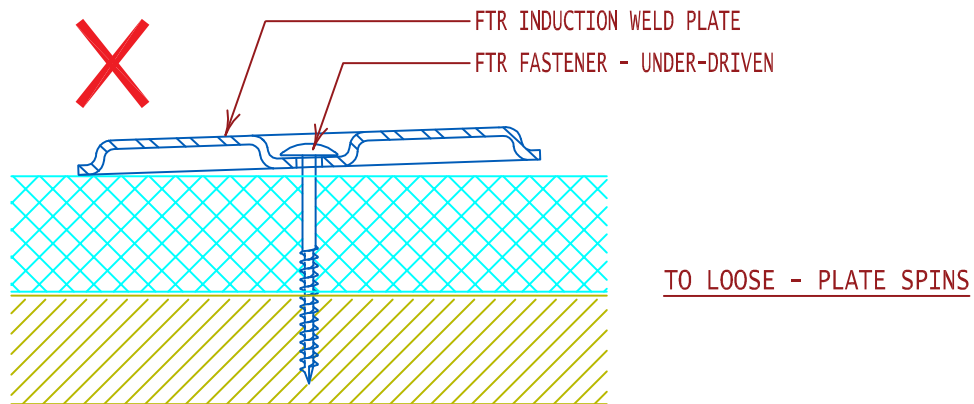
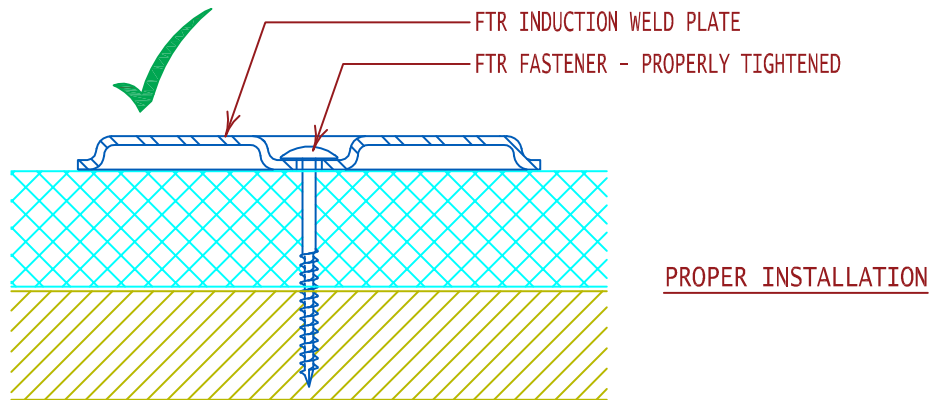




**Seaman Corporation**



DRAWING TITLE	DRAWING NUMBER	ISSUE DATE
FTR INDUCTION WELD PLATE & FTR FASTENER - PROPER INSTALLATION	FTR-IWS1	07/17/15
INDUCTION WELD ATTACHMENT METHODS (CLASS RATING 1-90 & 1-20)	FTR-IWIA1	07/17/15
INDUCTION WELD FIELD, PERIMETER & CORNER ATTACHMENT DESIGNATIONS	FTR-IWIA2	07/17/15
COMPOSITE ROOF SYSTEM CROSS SECTION (INDUCTION WELDED SYSTEM)	FTR-IWMF1	07/17/15
MECHANICALLY FASTENED INDUCTION WELDED SYSTEM OVER METAL RETROFIT	FTR-IWMR1	07/17/15
INDUCTION WELD PLATE ATTACHMENT LAYOUT ON METAL RETROFIT	FTR-IWMR3	07/17/15
INSULATION ATTACHMENT FOR METAL RETROFIT	FTR-MR2	02/10/14



**NOTE:**

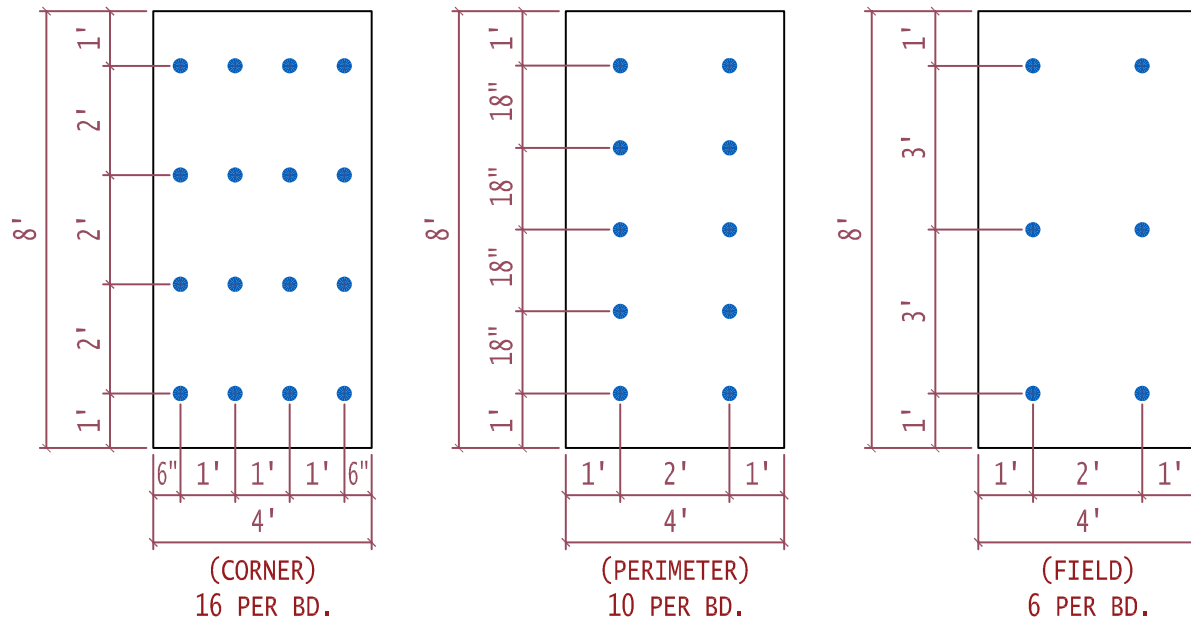
SPECIAL CARE SHALL BE TAKEN WHEN FASTENING PLATES INTO THE STRUCTURAL DECK. OVER-DRIVING THE FASTENER WILL RESULT IN BUCKLING OR "CUPPING" OF THE PLATE AND WILL RESULT IN AN UNEVEN OR INADEQUATE BOND TO THE MEMBRANE. UNDER-DRIVING THE FASTENER WILL RESULT IN A LOOSE PLATE WITH INSUFFICIENT CLAMPING FORCE AND PROTRUDING FASTENER HEAD THAT MAY CAUSE DAMAGE TO THE MEMBRANE DURING WELDING OR NORMAL ROOF TRAFFIC.



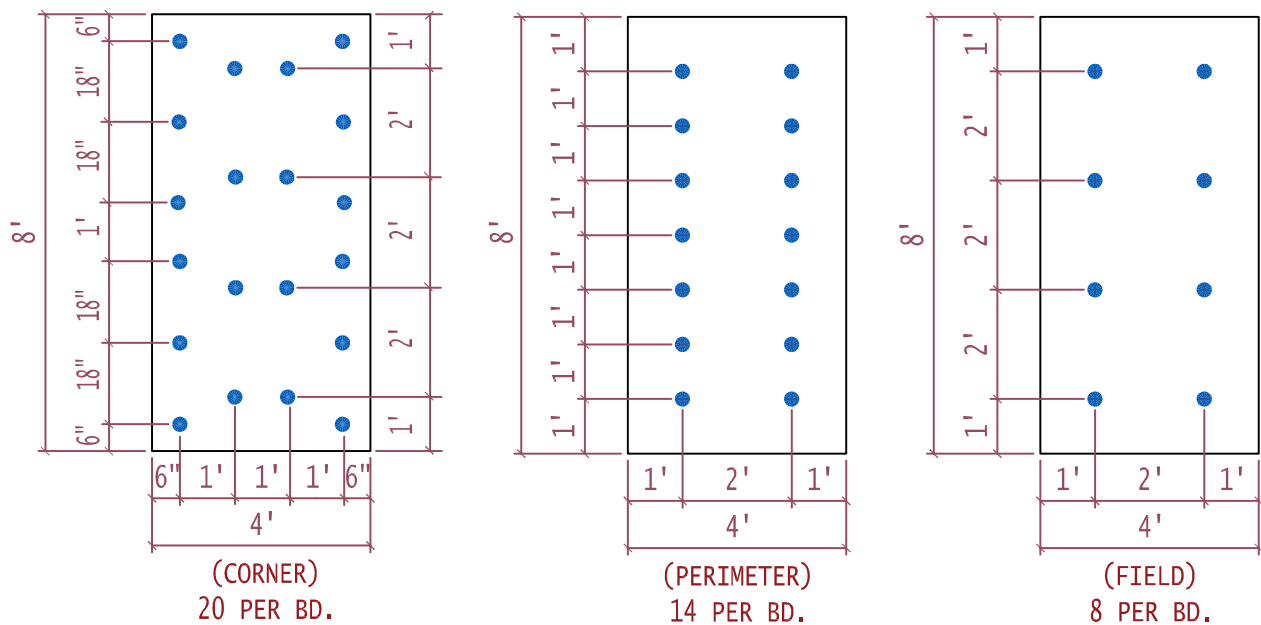
GENERAL REFERENCE:  
"FTR GS 02/13"  
APPLICABLE SYSTEMS:  
"FTR IW 07/15"

FTR INDUCTION WELD PLATE &  
FTR FASTENER - PROPER INSTALLATION

REVISES DETAIL	ISSUE DATE	DRAWING NUMBER
ALL PREVIOUS	07-17-15	FTR-IWS1



## 2' X 3' INDUCTION WELD FASTENING PATTERN : FIELD, PERIMETER & CORNER ATTACHMENT CLASS 1-90 RATING



## 2' X 2' INDUCTION WELD FASTENING PATTERN : FIELD, PERIMETER & CORNER ATTACHMENT CLASS 1-135 RATING

### NOTE:

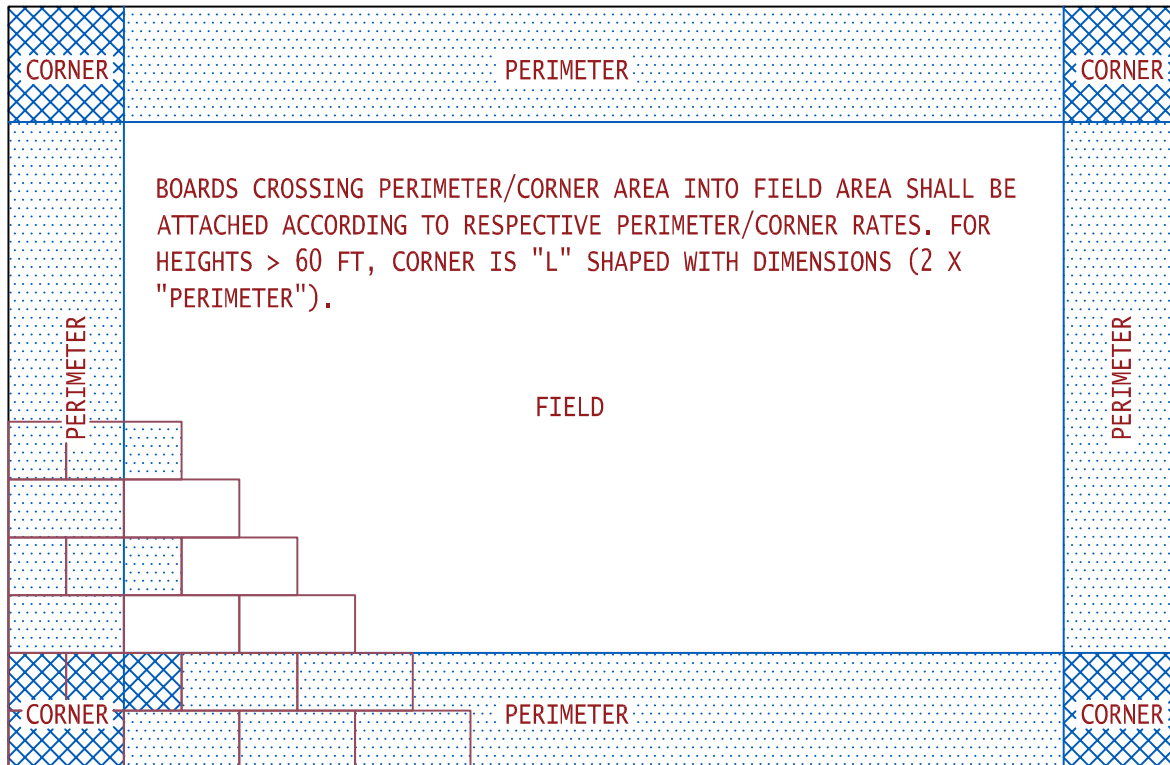
REFER TO DETAIL FTR-RBS1 FOR PROPER PLATE SECUREMENT TO ENSURE MAXIMUM MEMBRANE TO PLATE BONDING. WHEN INSTALLING MULTIPLE LAYERS OF INSULATION, ALL END JOINTS SHALL BE STAGGERED.



GENERAL REFERENCE:  
"FTR GS 02/13"  
APPLICABLE SYSTEMS:  
"FTR IW 07/15"

### INDUCTION WELD ATTACHMENT METHODS (CLASS RATING 1-90 & 1-135)

REVISES DETAIL	ISSUE DATE	DRAWING NUMBER
ALL PREVIOUS	07-17-15	FTR-IWIA1



PERIMETER AND CORNER WIDTH DIMENSIONS ARE DETERMINED BASED ON THE LESSER PRODUCT DERIVED BY MULTIPLYING THE BUILDING HEIGHT BY .4 (40%) OR THE LESSER BUILDING DIMENSION BY .1 (10%).

FTR APPROVED INSULATION INSTALLED IN THE FIELD OF THE ROOF IS SECURED IN ACCORDANCE WITH THE APPLICABLE CODE RATING REQUIREMENTS AND ENHANCED IN THE PERIMETER AND CORNER AREAS OF THE ROOF BY THE FOLLOWING FACTORS:

PERIMETER - 50% INCREASE OVER THE FIELD SECUREMENT RATE

CORNER - 100% INCREASE OVER THE FIELD SECUREMENT RATE

**NOTE:**

REFER TO DETAIL FTR-IWIA1 FOR TYPICAL INDUCTION WELD ATTACHMENT METHODS. WHEN INSTALLING MULTIPLE LAYERS OF INSULATION, ALL END JOINTS SHALL BE STAGGERED.



GENERAL REFERENCE:  
"FTR GS 02/13"

APPLICABLE SYSTEMS:  
"FTR IW 07/15"

INDUCTION WELD FIELD, PERIMETER & CORNER  
ATTACHMENT DESIGNATIONS

REVISES DETAIL

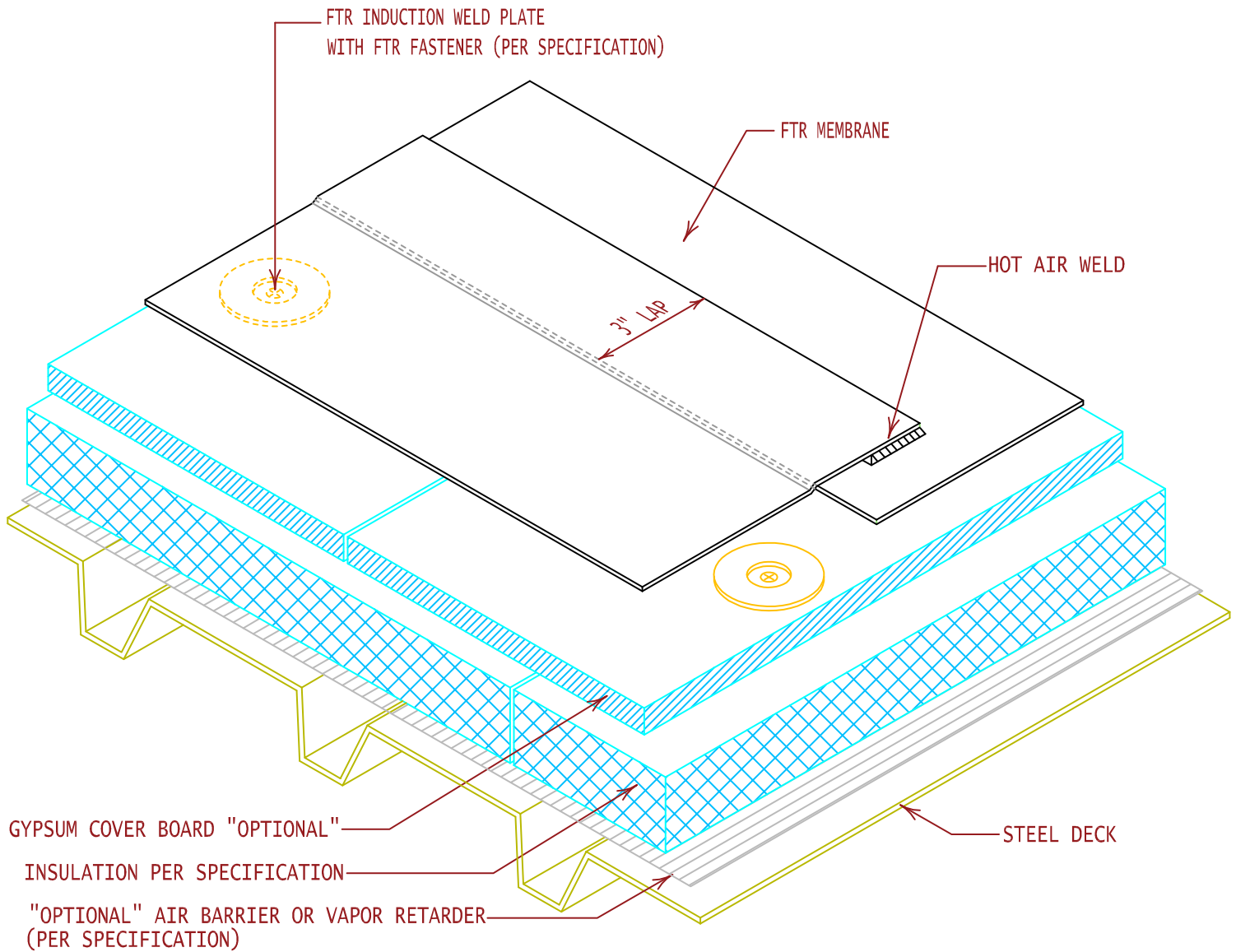
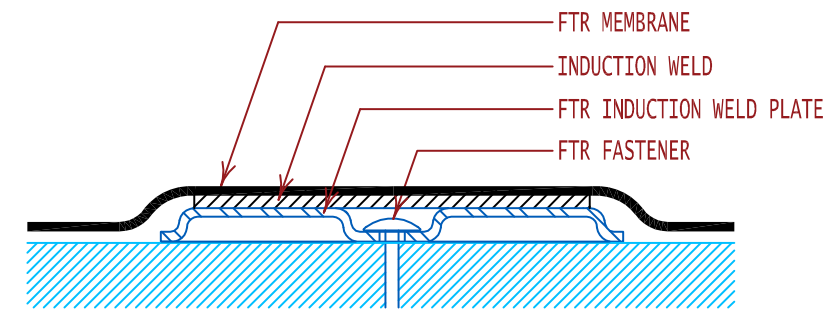
ISSUE DATE

DRAWING NUMBER

ALL PREVIOUS

07-17-15

FTR-IWIA2



**NOTE:**

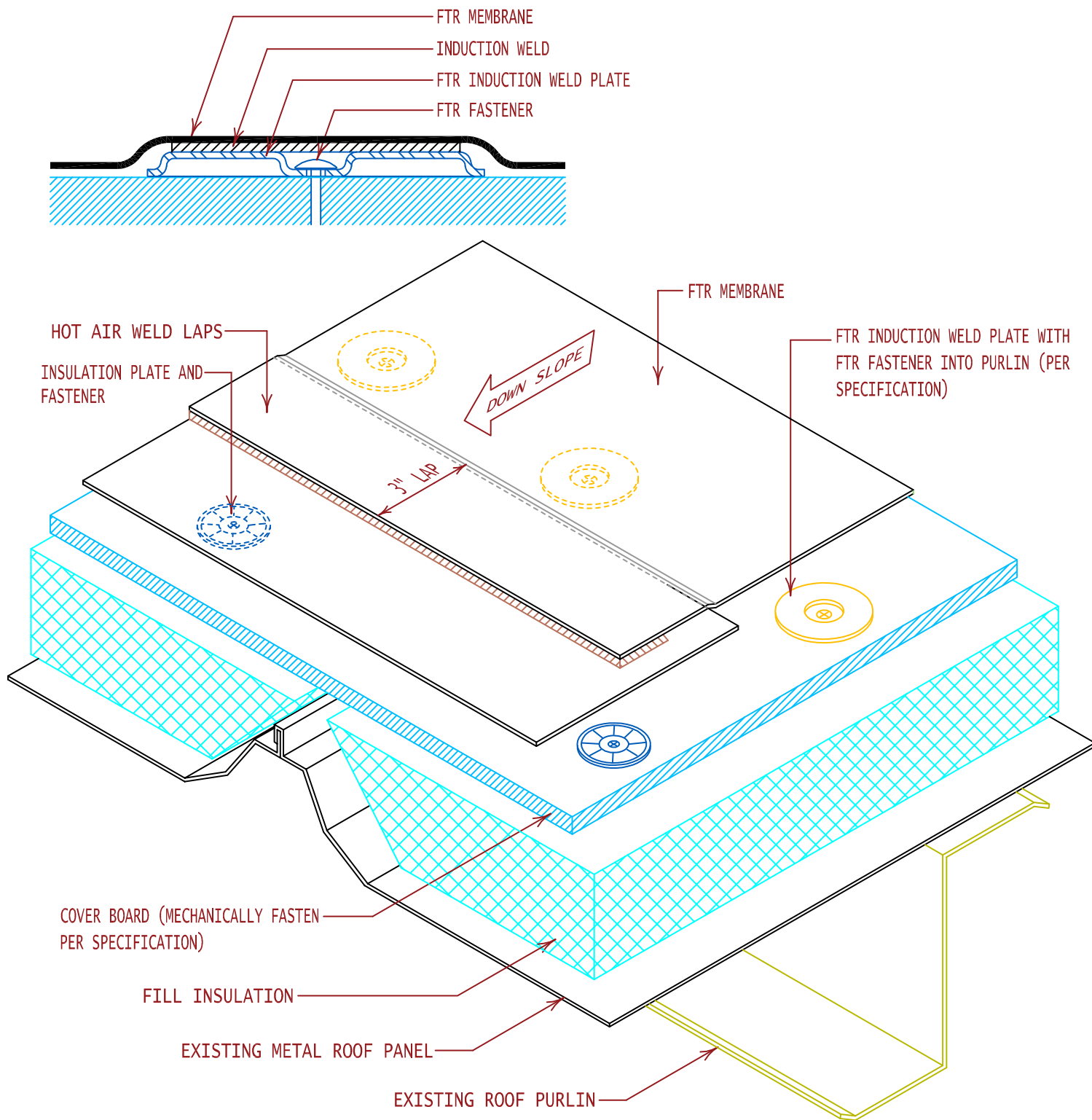
REFER TO DETAIL FTR-RBS1 FOR PROPER PLATE SECUREMENT TO ENSURE MAXIMUM MEMBRANE TO PLATE BONDING. WHEN INSTALLING MULTIPLE LAYERS OF INSULATION, ALL END JOINTS SHALL BE STAGGERED.



GENERAL REFERENCE:  
"FTR GS 02/13"  
APPLICABLE SYSTEMS:  
"FTR IW 07/15"

**COMPOSITE ROOF SYSTEM CROSS SECTION  
(INDUCTION WELDED SYSTEM)**

REVISES DETAIL	ISSUE DATE	DRAWING NUMBER
ALL PREVIOUS	07-17-15	FTR-IWMF1



**NOTE:**

REFER TO DETAIL FTR-IWS1 FOR PROPER PLATE SECUREMENT TO ENSURE MAXIMUM MEMBRANE TO PLATE BONDING. WHEN INSTALLING MULTIPLE LAYERS OF INSULATION, ALL END JOINTS SHALL BE STAGGERED.



GENERAL REFERENCE:  
"FTR GS 02/13"  
APPLICABLE SYSTEMS:  
"FTR IW 07/15"  
"FTR MR 11/13"

**MECHANICALLY FASTENED INDUCTION WELDED  
SYSTEM OVER METAL RETROFIT**

REVISES DETAIL	ISSUE DATE	DRAWING NUMBER
ALL PREVIOUS	07-17-15	FTR-IWMR1



CORNER ZONE	6" O.C.
PERIMETER ZONE	8" O.C.
FIELD ZONE	12" O.C.



APPLICABLE SYSTEMS:  
"FTR IW 07/15"  
"FTR MR 11/13"

## INDUCTION WELD (IW) PLATE ATTACHMENT LAYOUT ON METAL RETROFIT

REVISES DETAIL	ISSUE DATE	DRAWING NUMBER
ALL PREVIOUS	07-17-15	FTR-IWMR3

