

NOTES:

EPS TOP HATS INCREASE INSUL-DECK'S EFFECTIVE JOIST (T-BEAM) DEPTH WHICH IN TURN INCREASES LIVE LOAD CAPACITY AND CLEAR SPAN OF THE FLOOR SYSTEM

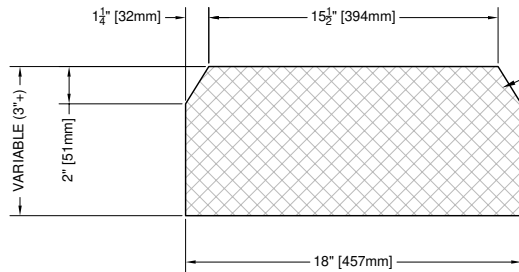
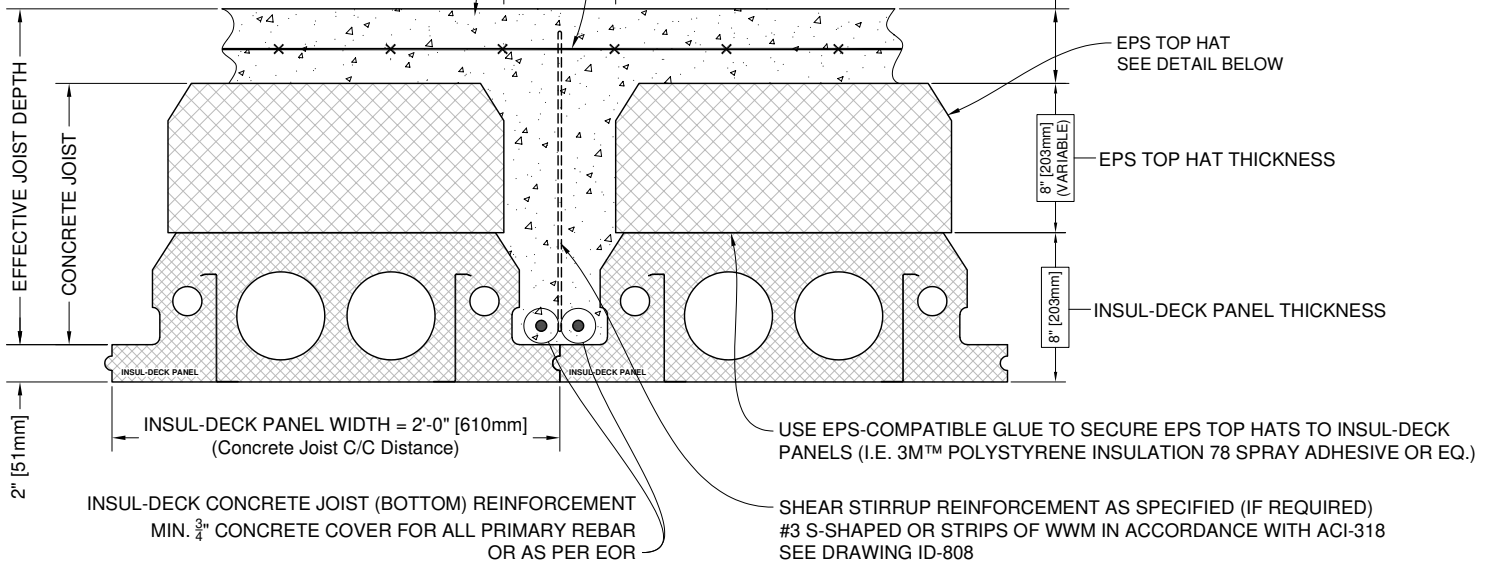
WHEN SELECTING TOP HAT THICKNESS, PAY ATTENTION TO MAXIMUM SLENDERNESS (HEIGHT TO WIDTH) RATIO FOR CONCRETE JOISTS

CONCRETE COMPRESSIVE STRENGTH AS SPECIFIED
MAX. $\frac{3}{8}$ " [10mm] AGGREGATE AND 6" [150mm] SLUMP
OR AS PER EOR

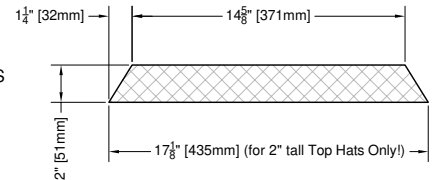
SLAB REINFORCEMENT AS PER EOR
E.G. WWM 6x6 [152x152] OR #3 [10M] EACH WAY

JOIST WIDTH = 6" [152mm]

SLAB THICKNESS RANGE
2" TO 6" [50mm TO 150mm]



EPS TOP HAT - ID15-Fabricated
CUSTOM ORDERED IN ANY HEIGHT
COMES IN 4' OR 8' [1.22m OR 2.44m] LONG SECTIONS
MADE FROM MODIFIED EXPANDED POLYSTYRENE
(EPS - INCLUDES FLAME-RETARDANT)
DENSITY - REFER TO TABLE BELOW



Product	U.S. EPS Board Type (ASTM C578)	Canada EPS Board Type (CAN/ULC-S701)	Density	Thermal Conductance (per inch [25mm] thickness)
EPS Top Hats - ex Canada	Type II	Type 2	min. 1.35 pcf [21.6 kg/m ³]	R-4.00 ft. ² •h•°F/Btu [RSI-0.7044 K•m ² /W]
EPS Top Hats - ex Villa Rica, GA	Type VIII	Type 1	min. 1.15 pcf [18.4 kg/m ³]	R-3.80 ft. ² •h•°F/Btu [RSI-0.6692 K•m ² /W]
Insul-Deck	Type VIII	Type 1	avg. 1.25 pcf [20 kg/m ³]	R-3.80 ft. ² •h•°F/Btu [RSI-0.6692 K•m ² /W]

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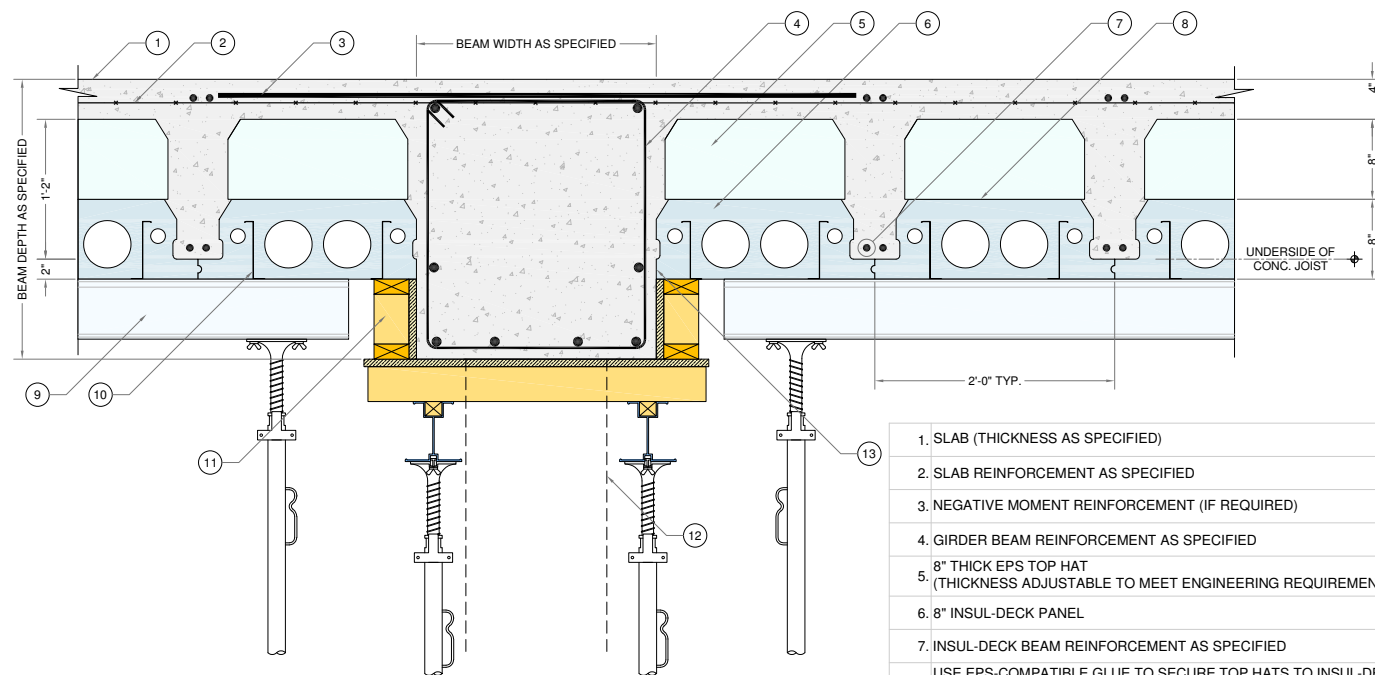
INSUL-DECK
65 Grady Knight Industrial Ct.
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Web: www.insuldeck.com

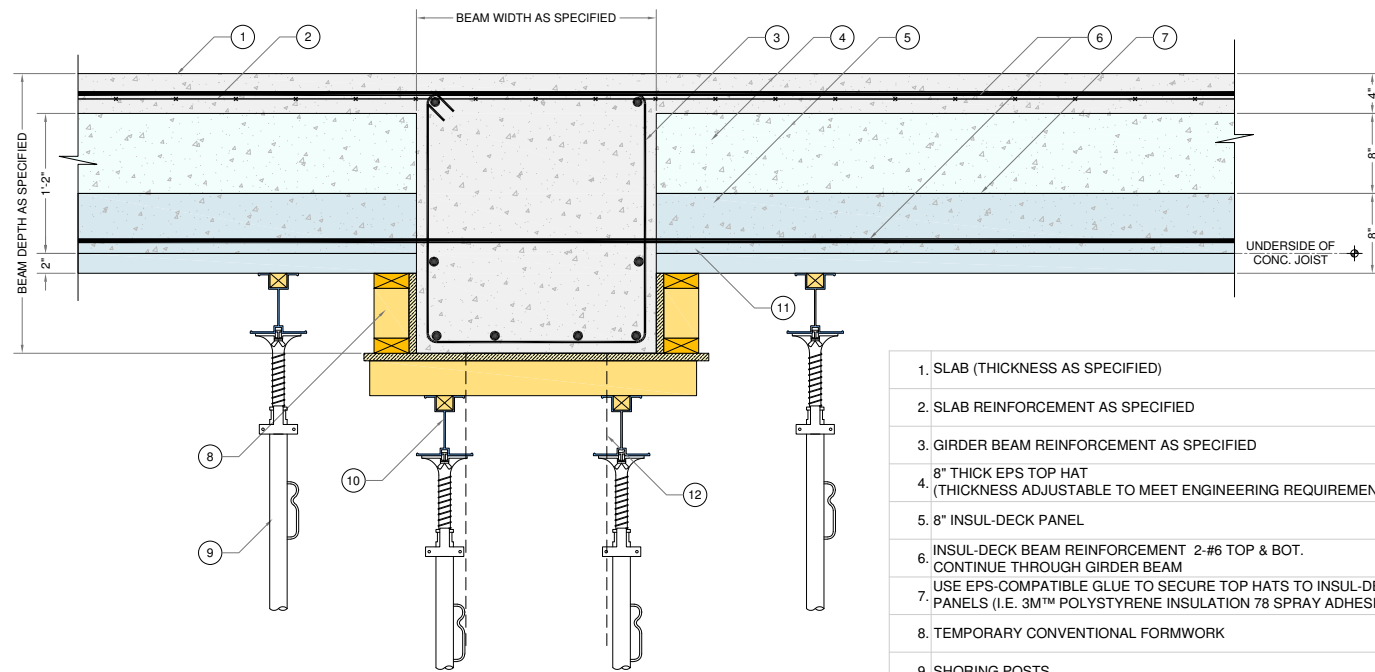
IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE REGULATIONS AND BUILDING CODE REQUIREMENTS CONCERNING THE USE OF THESE PRODUCTS.
IT IS FURTHER THE RESPONSIBILITY OF THE USER TO RESEARCH AND UNDERSTAND SAFE METHODS OF USE AND HANDLING OF THESE PRODUCTS.

EPS Top Hats

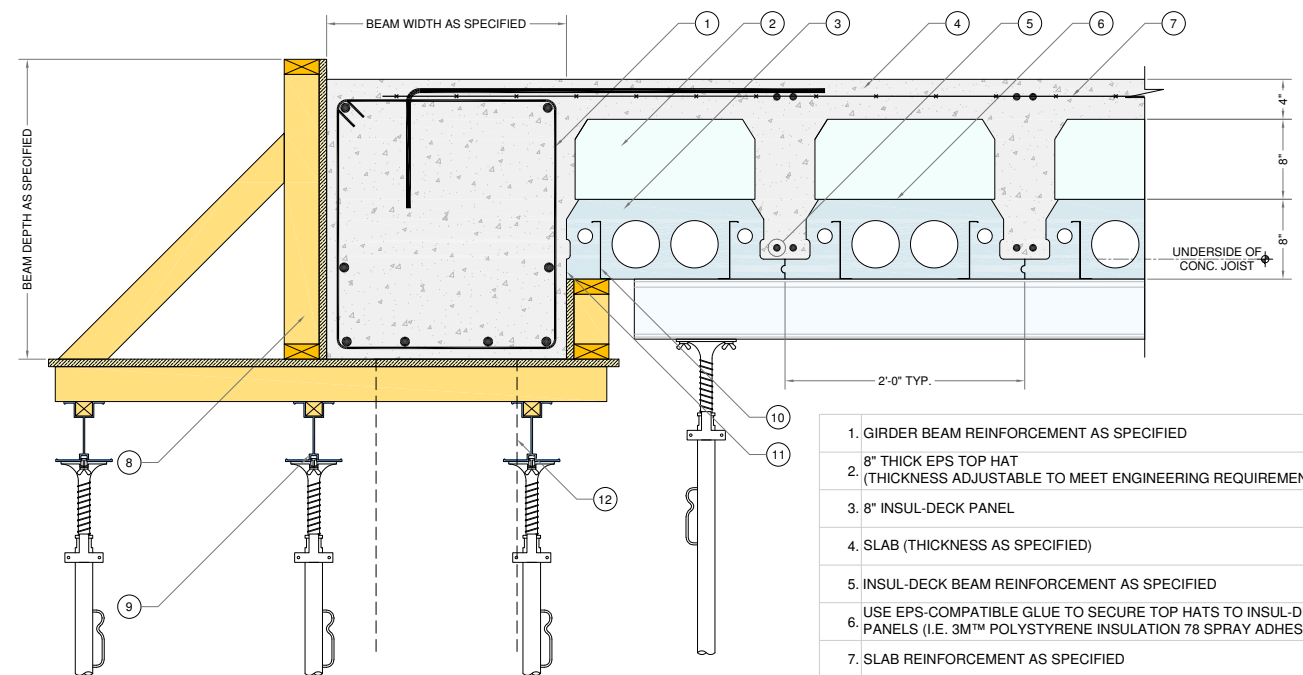
DATE DRAWN:	2017-02-15	COMMENTS:	N/A
REVISION NO.:	R3	SHEET SIZE:	8.5" x 11" [216mm x 279mm]
REVISION DATE:	2025-12-16	SCALE:	NOT TO SCALE
DRAWN BY:	TECHNICAL	APPROVED BY:	G. K.
			ID-108



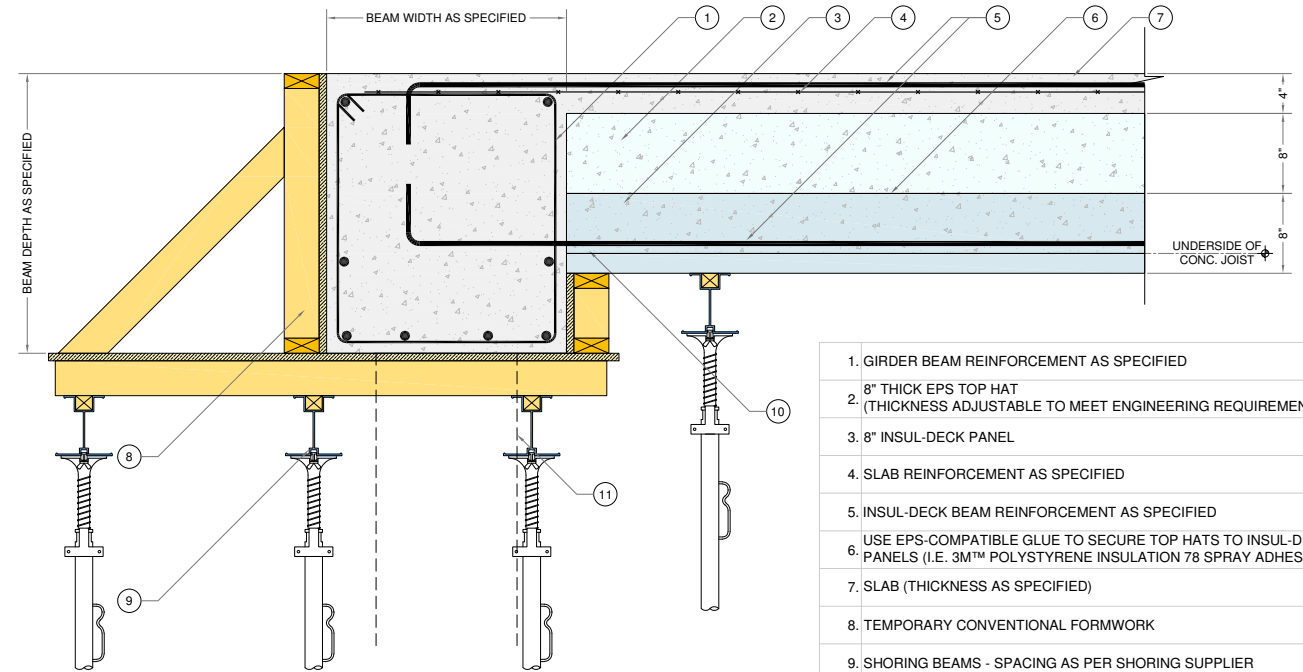
1 SECTION DETAIL
S-1 SCALE: N.T.S.



2 SECTION DETAIL
S-1 SCALE: N.T.S.

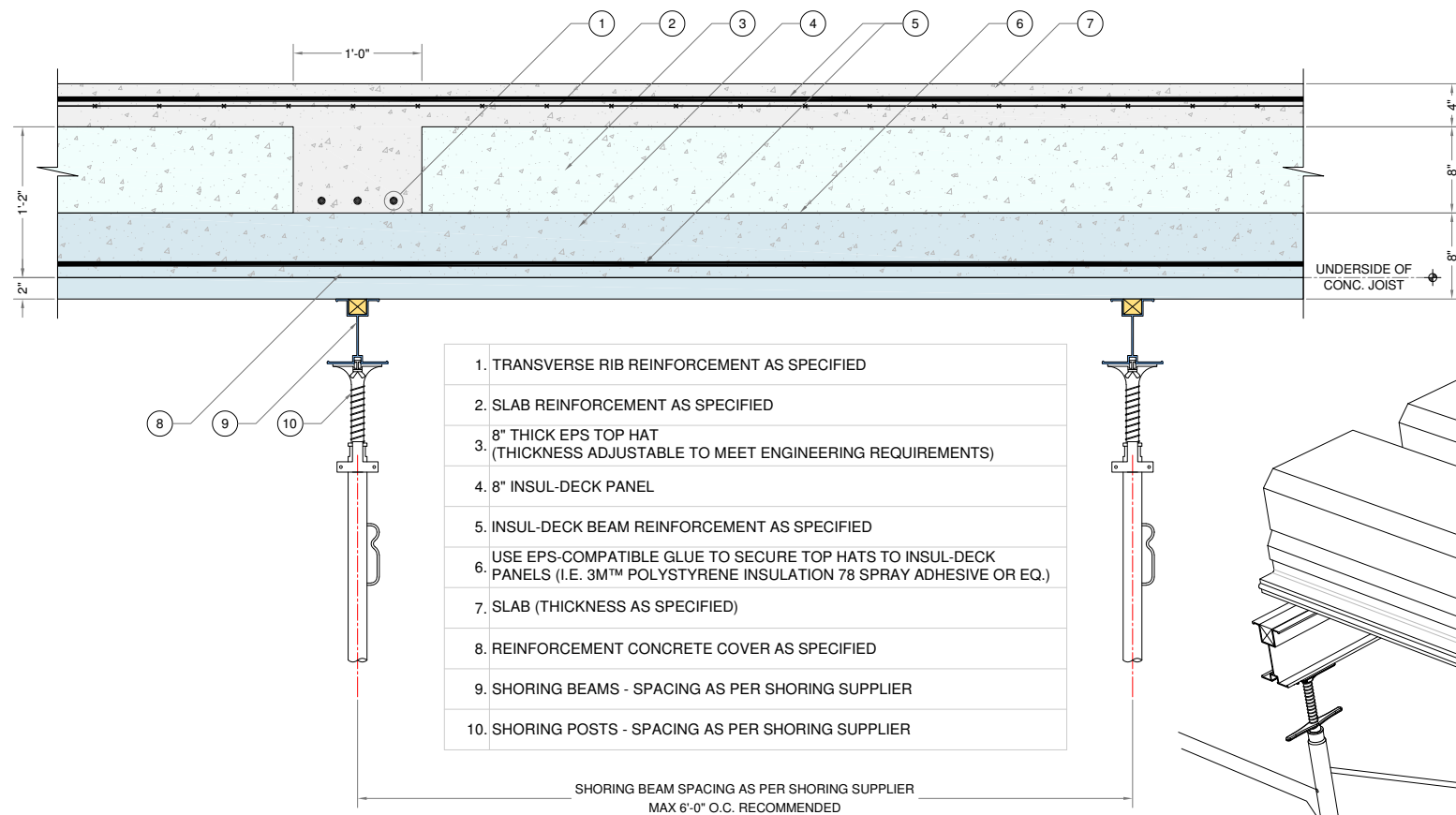


3 SECTION DETAIL
S-1 SCALE: N.T.S.

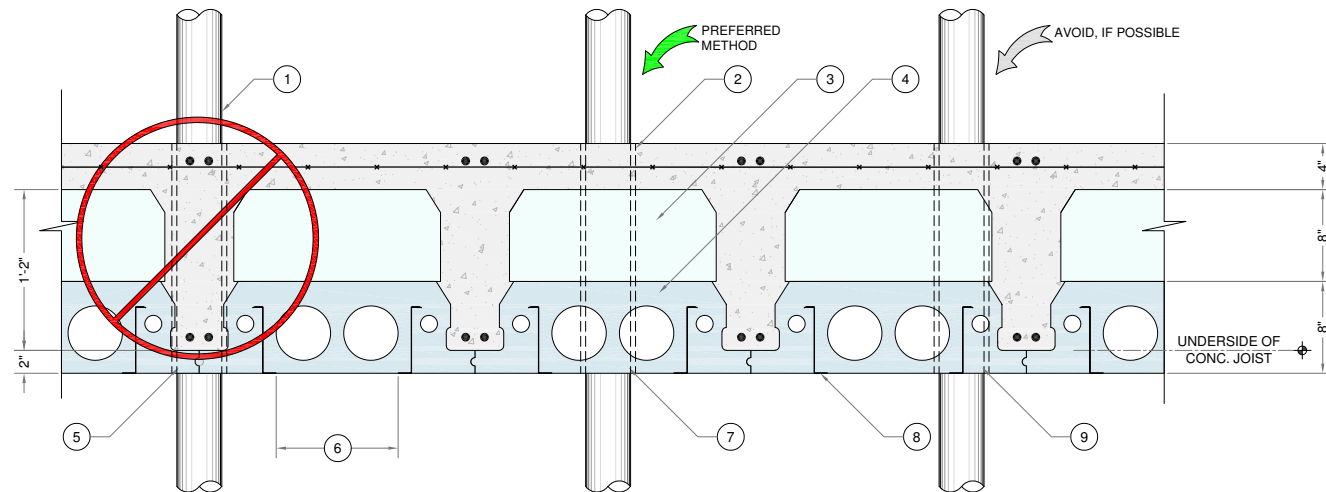


4 SECTION DETAIL
S-1 SCALE: N.T.S.

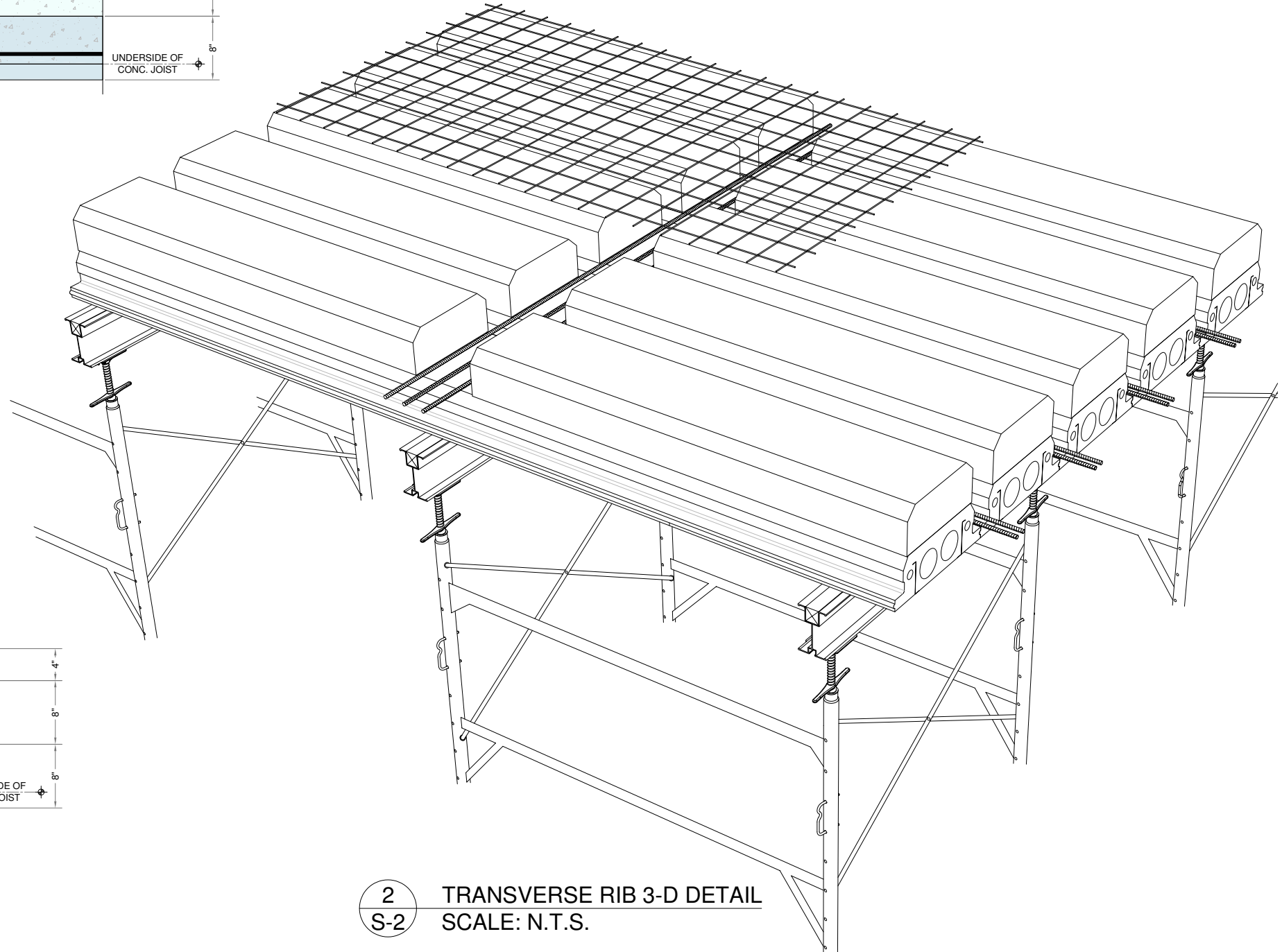
Plastbau® Technology INSUL-DECK® Lightweight Forming System for Concrete Floors and Roofs INSUL-DECK 65 Grady Knight Industrial Ct. Villa Rica, GA 30180-2107 Phone: 800-475-6720 Fax: 727-216-7946 Email: insuldeck@insuldeck.com Web: www.insuldeck.com		TYPICAL INSUL-DECK TO BEAM INTERFACE DETAILS	
DATE:	2012-01-15	SCALE:	NOT TO SCALE
REVISION NO:	R-03	CUSTOMER:	
REVISION DATE:	2017-09-13	PROJECT:	
DRAWN BY:	TECHNICAL	APPROVED BY:	G. K.
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DRAWING NO: S-1			



1 TRANSVERSE RIB DETAIL
S-2 SCALE: N.T.S.



3 PENETRATION DETAIL
S-2 SCALE: N.T.S.

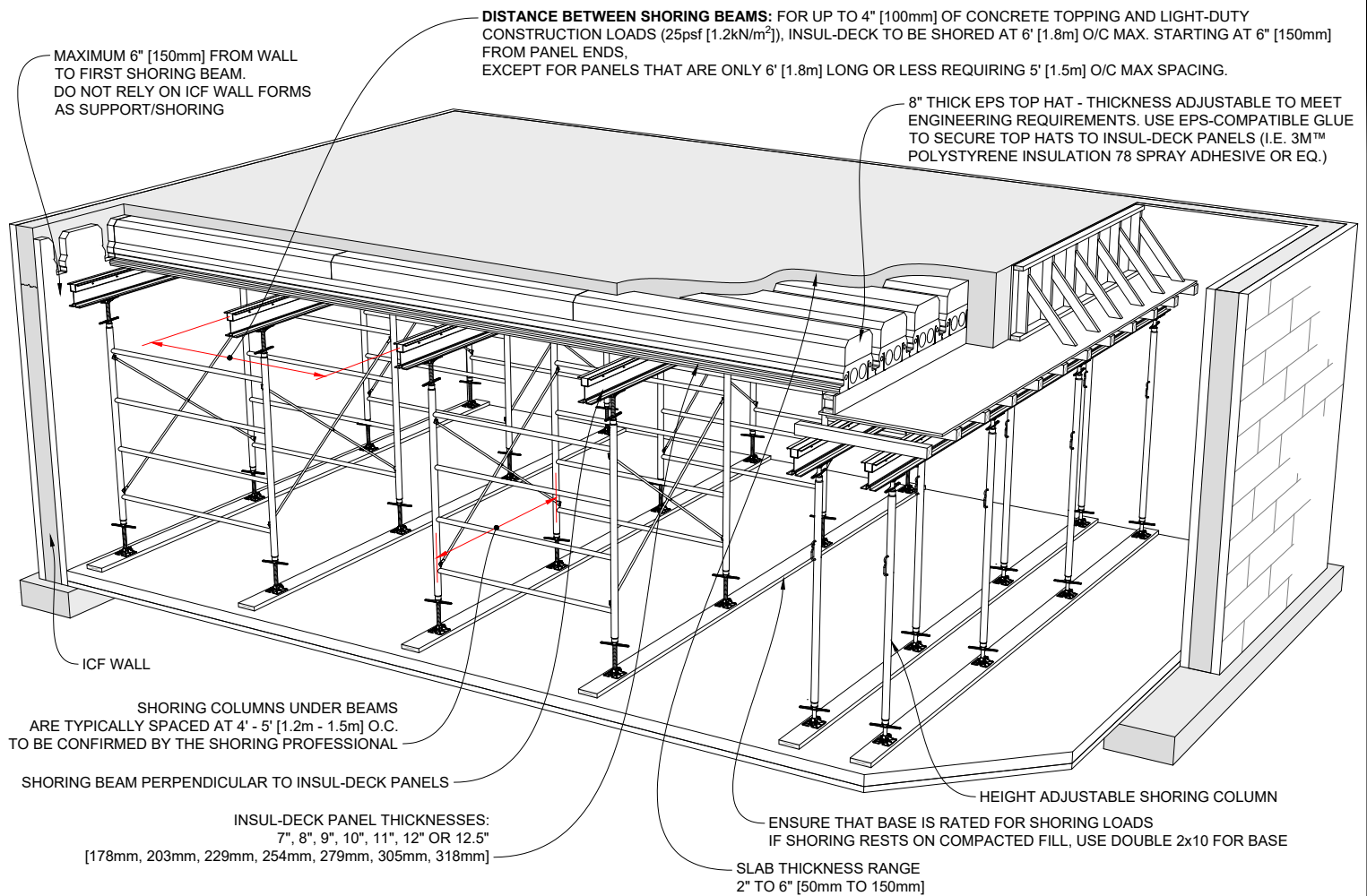


2 TRANSVERSE RIB 3-D DETAIL
S-2 SCALE: N.T.S.

1. UTILITY RISER TYP.
2. SLEEVE FOR UTILITY RISER.
3. 8" THICK EPS TOP HAT (THICKNESS ADJUSTABLE TO MEET ENGINEERING REQUIREMENTS)
4. 8" INSUL-DECK PANEL
5. PENETRATIONS AT THIS LOCATION CAN BE DONE ONLY WITH PERMISSION FROM ENGINEER OF RECORD
6. PREFERRED UTILITY LINE LOCATION
7. PREFERRED LOCATION FOR UTILITY PENETRATION
8. INTEGRATED INSUL-DECK PANEL METAL FURRING FOR FINISH ATTACHMENT - SPACING @ 12" O.C.
9. UTILITY PENETRATIONS ARE OK. NOTE THAT THE METAL FURRING MUST BE CUT AND ADDITIONAL SHORING AND/OR PLYWOOD FORMWORK SUPPORT IS NECESSARY
10. SHORING OMITTED FOR CLARITY

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TYPICAL INSUL-DECK TRANSVERSE RIB & PENETRATION DETAILS			
DATE:	2012-01-15	SCALE:	NOT TO SCALE
REVISION NO:	R-03	CUSTOMER:	
REVISION DATE:	2017-09-13	PROJECT:	
DRAWN BY:	TECHNICAL	APPROVED BY:	G. K.
			S-2



1 TYPICAL INSUL-DECK WITH EPS TOP HATS SHORING LAYOUT

REINFORCEMENT OMITTED FOR CLARITY

SHORING AND BRACING:

INSTALLER IS RESPONSIBLE FOR THE DESIGN AND CORRECT INSTALLATION OF SHORING OF INSUL-DECK FORMS IN ACCORDANCE WITH ACI (AMERICAN CONCRETE INSTITUTE) 347-04 "GUIDE TO FORMWORK FOR CONCRETE" OR CURRENT APPLICABLE CODES. ANY VARIANCE FROM THESE STANDARDS MUST BE PROVIDED AND CERTIFIED IN ADVANCE BY A QUALIFIED ENGINEER, LICENSED FOR THE JOBSITE LOCATION AND SPECIFICATIONS.

Insul-Deck with Top Hats Floor Weights (lb/sqft)

	2" Slab	3" Slab	4" Slab	5" Slab
8" Insul-Deck Panel + 5" Top Hat	64.2	76.7	89.2	101.7
8" Insul-Deck Panel + 6" Top Hat	67.4	79.9	92.4	104.9
8" Insul-Deck Panel + 7" Top Hat	70.5	83.0	95.5	108.0
8" Insul-Deck Panel + 8" Top Hat	73.6	86.1	98.6	111.1
8" Insul-Deck Panel + 9" Top Hat	76.7	89.2	101.7	114.2
8" Insul-Deck Panel + 10" Top Hat	79.9	92.4	104.9	117.4
8" Insul-Deck Panel + 11" Top Hat	83.0	95.5	108.0	120.5
8" Insul-Deck Panel + 12" Top Hat	86.1	98.6	111.1	123.6

Notes:

The above are unfactored estimated weights which include concrete (150pcf), reinforcement (3lb/sqft), Insul-Deck Panel (2lb/sqft) and misc. (2lb/sqft)

Insul-Deck with Top Hats Floor Weights (Kg/m²)

	50mm Slab	75mm Slab	100mm Slab	125mm Slab
203mm Insul-Deck Panel + 130mm Top Hat	297.4	357.4	417.4	477.4
203mm Insul-Deck Panel + 150mm Top Hat	302.9	362.9	422.9	482.9
203mm Insul-Deck Panel + 180mm Top Hat	311	371	431	491
203mm Insul-Deck Panel + 200mm Top Hat	316.5	376.5	436.5	496.5
203mm Insul-Deck Panel + 230mm Top Hat	324.6	384.6	444.6	504.6
203mm Insul-Deck Panel + 250mm Top Hat	330.1	390.1	450.1	510.1
203mm Insul-Deck Panel + 280mm Top Hat	338.2	398.2	458.2	518.2
203mm Insul-Deck Panel + 300mm Top Hat	343.7	403.7	463.7	523.7

Notes:

The above are unfactored estimated weights which include concrete (2400kg/m³), reinforcement (15Kg/m²), Insul-Deck Panel (10Kg/m²) and misc. (10Kg/m²)

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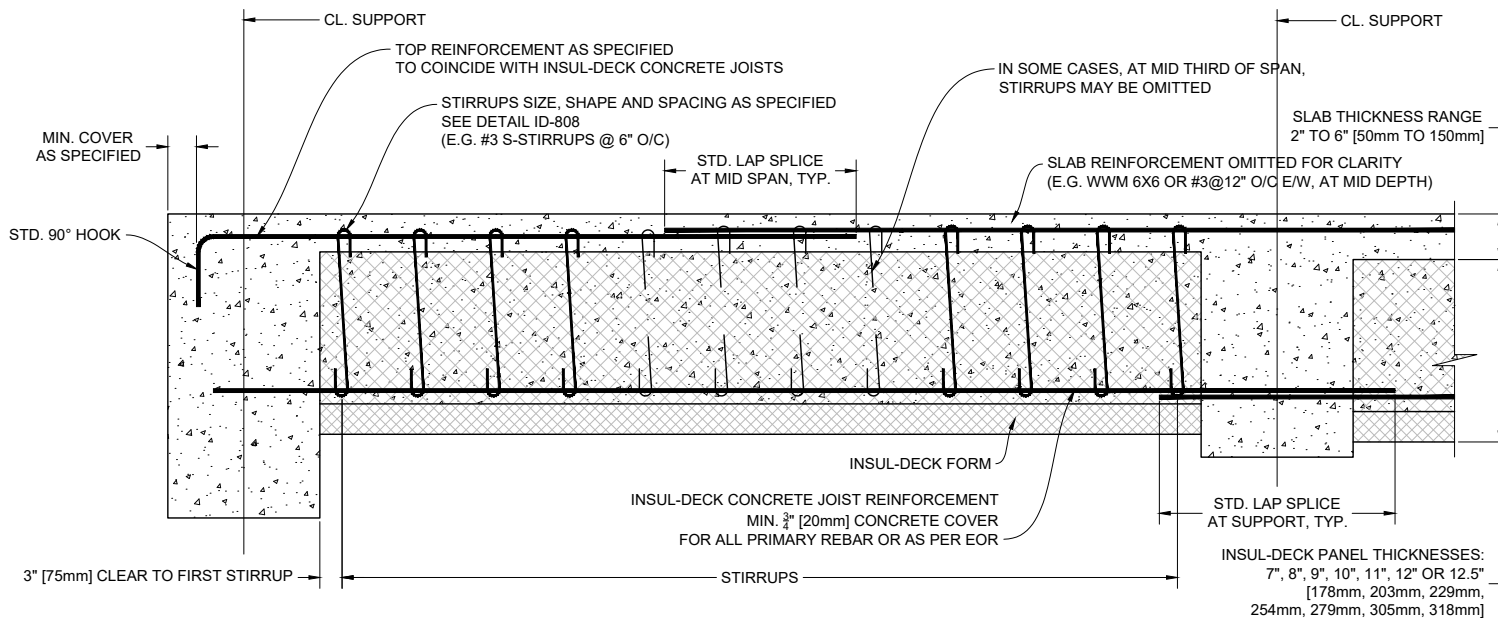
Web: www.insuldeck.com

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INSUL-DECK & EPS TOP HAT SHORING DETAIL

DATE DRAWN:	2017-02-15	COMMENTS:	N/A
REVISION NO:	R2	SHEET SIZE:	8.5" x 11" [216mm x 279mm]
REVISION DATE:	2021-10-01	SCALE:	NOT TO SCALE
DRAWN BY:	TECHNICAL	APPROVED BY:	G. K.
			DRAWING NO: ID-112



BEAM AND JOIST CURTAILMENT RULES

	TYPE	DESCRIPTION	SUPPORT		SUPPORT	
TOP REINF.	TL	CONTINUOUS TOP LEFT END CONDITION				
	TC	CONTINUOUS TOP				
	TR	CONTINUOUS TOP RIGHT END CONDITION				
BOT. REINF.	BL	CONTINUOUS BOTTOM BAR LEFT END CONDITION				
	BC	CONTINUOUS BOTTOM				
	BR	CONTINUOUS BOTTOM RIGHT END CONDITION				

CL. SUPPORT

CL. SPAN

CL. SUPPORT

CL. SPAN

1 INSUL-DECK CONCRETE JOIST REINFORCEMENT DETAIL

FOR SPECIAL CASES ONLY

Scale: N.T.S.

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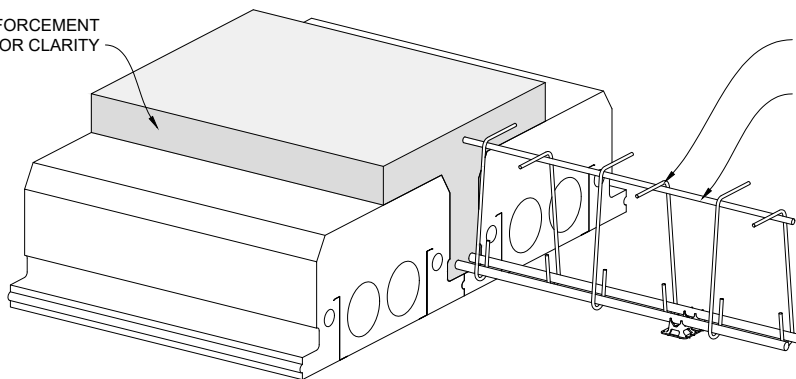
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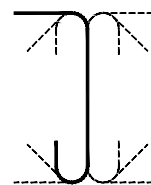
CONCRETE JOIST REINFORCEMENT DETAIL SPECIAL CASES ONLY

DATE DRAWN:	2017-02-15	COMMENTS:	N/A
REVISION NO.:	R2	SHEET SIZE:	8.5" x 11" [216mm x 279mm]
REVISION DATE:	2021-10-01	SCALE:	NOT TO SCALE
DRAWN BY:	TECHNICAL	APPROVED BY:	G. K.
			ID-114

SLAB REINFORCEMENT
OMITTED FOR CLARITY



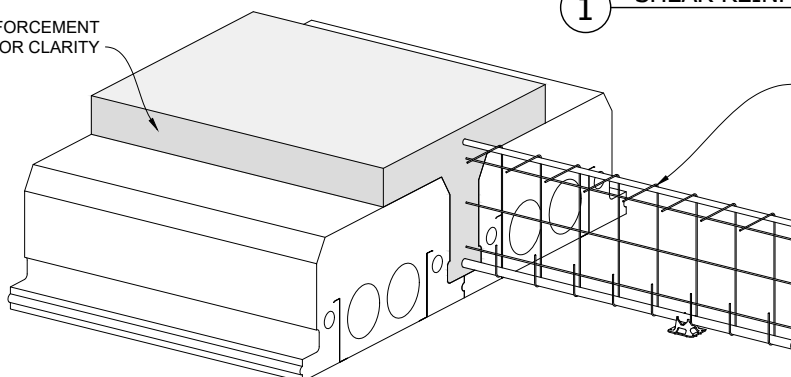
STIRRUPS AS SPECIFIED
ALTERNATE LEFT TO RIGHT
TOP LONGITUDINAL DEVELOPMENT BAR



1 SHEAR REINFORCEMENT OPTION 1

Scale: N.T.S.

SLAB REINFORCEMENT
OMITTED FOR CLARITY

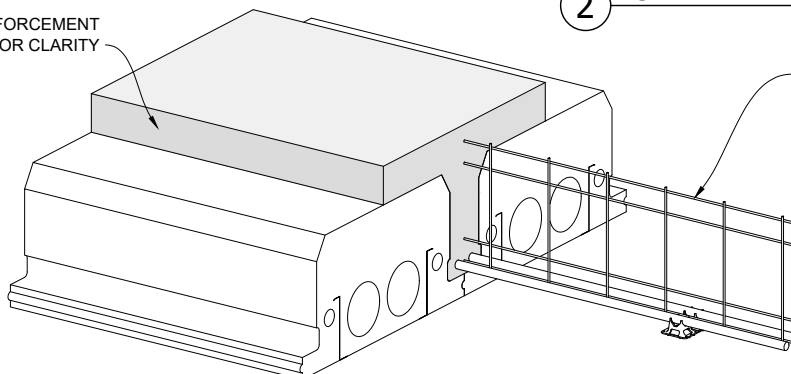


WELDED WIRE FABRIC/MESH - REFER TO ACI-117
BOTTOM WITH U-HOOK DEVELOPMENT, TOP FLAT FOR INSTALL
VERTICAL STRAND SPACING AS REQUIRED BY SHEAR CALC'S.

2 SHEAR REINFORCEMENT OPTION 2

Scale: N.T.S.

SLAB REINFORCEMENT
OMITTED FOR CLARITY



WELDED WIRE FABRIC/MESH
REFER TO ACI-318 CHAPTER 12 FOR SPECIFIC DIMENSIONAL
REQUIREMENTS FOR HORIZONTAL STRANDS
VERTICAL STRAND SPACING AS REQUIRED BY SHEAR CALC'S.
(TOP LONGITUDINAL BAR NOT NEEDED FOR DEVELOPMENT)

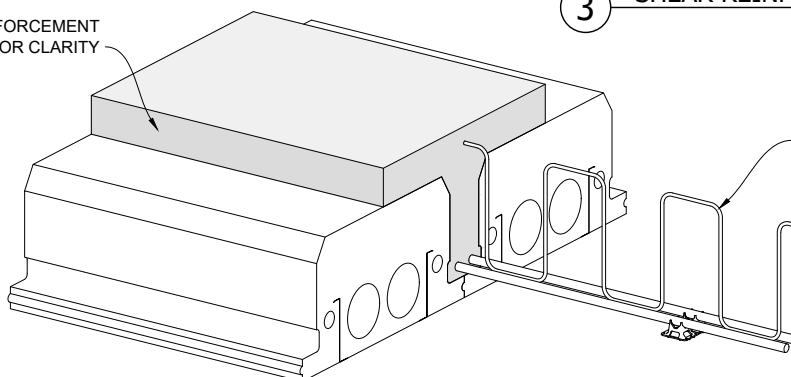
TOP STRAND TO HAVE MIN. COVER AS REQUIRED
SECOND TOP STRAND TO BE 2" DOWN

BOTTOM STRAND TO BE IN LINE WITH
LONGITUDINAL REINFORCEMENT
NEXT STRAND TO BE 2" UP.

3 SHEAR REINFORCEMENT OPTION 3

Scale: N.T.S.

SLAB REINFORCEMENT
OMITTED FOR CLARITY



SINGLE BAR (TYPICALLY #3 [10m]) BENT AS REQUIRED
(TOP LONGITUDINAL BAR NOT NEEDED FOR DEVELOPMENT)

4 SHEAR REINFORCEMENT OPTION 4

Scale: N.T.S.

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SHEAR STIRRUP OPTIONS

DATE DRAWN:	2017-02-15	COMMENTS:	N/A
REVISION NO.:	R2	SHEET SIZE:	8.5" x 11" [216mm x 279mm]
REVISION DATE:	2021-10-01	SCALE:	NOT TO SCALE
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			ID-808