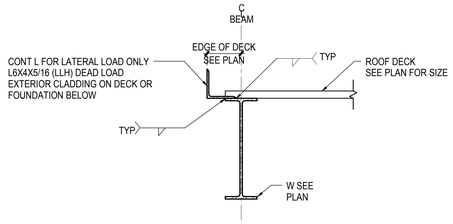
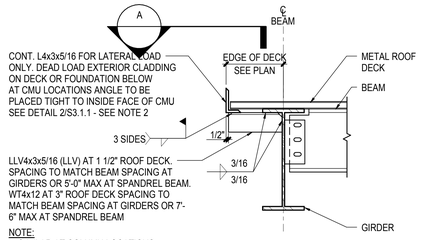


TYPICAL ROOF DECK EDGE UP TO 7" UP TO 8" AT LOADING DOCK CANOPY

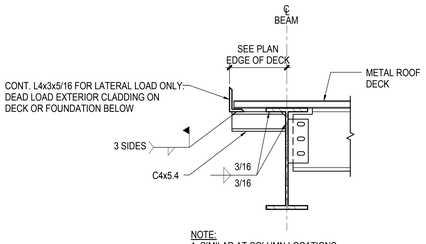
1 1" = 1'-0"



NOTE:
1. SIMILAR AT COLUMN LOCATIONS.
2. AT CMU WALL LOCATIONS, PLACE ANGLE (WITH PRE-DRILLED HOLES) IN SEGMENTS THAT SPAN WT TO WT. WELD CUT ENDS OF ANGLES TO TOP OF WT FLANGE

TYPICAL ROOF DECK EDGE, 8" TO < 14"

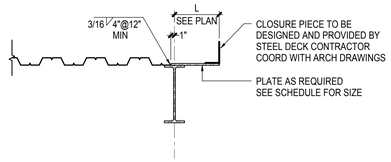
2 1" = 1'-0"



NOTE:
1. SIMILAR AT COLUMN LOCATIONS.

TYPICAL ROOF DECK EDGE, 14" TO < 20"

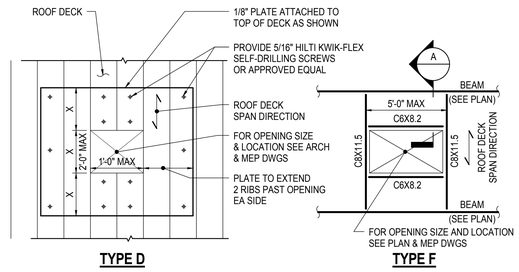
3 1" = 1'-0"



L	THICKNESS OF PLATE OR CLOSURE
≤ 1'-4"	1/4"
≤ 1'-0"	10 GAGE
≤ 0'-10"	12 GAGE

TYPICAL ROOF DECK EDGE AT OPENINGS

4 3/4" = 1'-0"

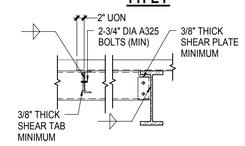


TYPE D

TYPE F

NOTES :

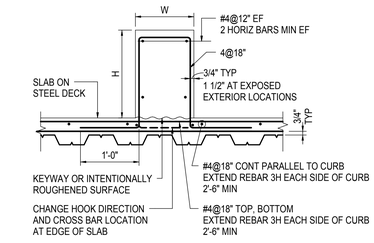
1. NO REINFORCEMENT REQUIRED IF OPENING IS 6"x6" OR SMALLER PROVIDED ONLY ONE RIB IS INTERRUPTED
2. CLUSTERED OPENINGS WITH CLEAR SPACE LESS THAN 1'-0" SHALL BE TREATED AS ONE LARGE OPENING AND PROVIDE THE REINFORCEMENT OR CHANNEL FRAMING AS PER DETAIL ABOVE
3. ATTACH DECK TO CHANNELS TYPICAL
4. TYPE D SHALL NOT BE USED TO SUPPORT MECHANICAL EQUIPMENT
5. TYPE F FRAMING SHALL BE COORDINATED WITH EQUIPMENT SUPPORT FRAMING



SECTION A

TYPICAL ROOF DECK AT OPENINGS

5 3/4" = 1'-0"



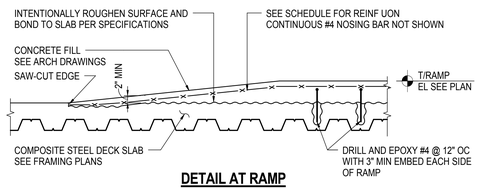
CURB WIDTH OVER 8"

NOTES:

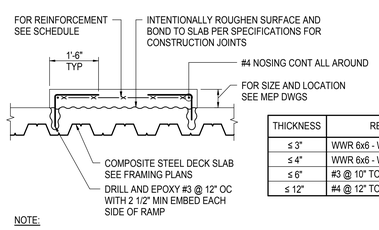
1. FOR SIZE AND LOCATION SEE ARCH, MEP, OR STRUCT DWGS
2. ROUGHEN SURFACE OF SLAB TO 1/4" AMPLITUDE CLEAN THOROUGHLY AND APPLY EPOXY BONDING COMPOUND IMMEDIATELY BEFORE CASTING CURB
3. THIS DETAIL IS APPLICABLE TO CURBS SUPPORTING EXTERIOR WALLS
   SEE ADDITIONAL DETAILS FOR CURTAIN WALL SUPPORT
   SEE ARCH DRAWINGS FOR EMBEDDED PLATES AND BLOCKOUTS
4. SEE ARCH DRAWINGS FOR EMBEDDED PLATES AND BLOCKOUTS
   REPLACE REINFORCEMENT INTERRUPTED BY BLOCKOUTS
5. AT CONTRACTORS OPTION DRILLED & EPOXIED DOWELS MAY BE PERMITTED
   BAR SIZE & SPACING MAY CHANGE DEPENDING ON EMBEDMENT REQUIRED
   CONTRACTOR TO VERIFY WITH SER

TYPICAL CURB DETAILS (SUBJECT TO LATERAL LOADS)

6 NOT TO SCALE



DETAIL AT RAMP



THICKNESS	REINFORCEMENT
≤ 3"	WWR 6x6 - W2.9xW2.9
≤ 4"	WWR 6x6 - W4.0xW4.0
≤ 6"	#3 @ 10" TOP EACH WAY
≤ 12"	#4 @ 12" TOP & BOTTOM EACH WAY

NOTE:

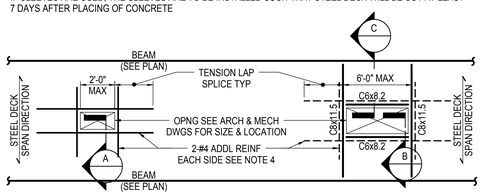
1. THIS DETAIL IS NOT APPLICABLE TO GENERAL RAISED SLAB AREA HIGHER THAN 4" OTHER THAN MECHANICAL PADS AND HOUSEKEEPING PADS

TYPICAL DETAIL OF CONCRETE FILL HOUSEKEEPING PAD/MECHANICAL PAD

7 NOT TO SCALE

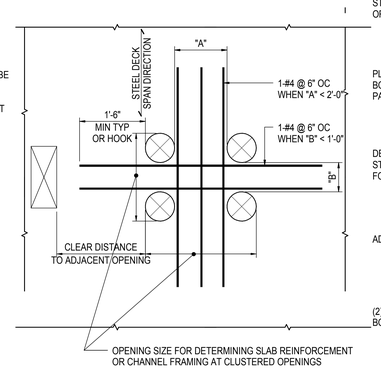
NOTES:

1. NO REINFORCEMENT IS REQUIRED FOR OPENING SIZE LESS THAN 10"X10" IF ALL OF THE FOLLOWING CRITERIA ARE MET:
   A.) STEEL DECK WILL BE CUT AT LEAST 7 DAYS AFTER PLACING OF CONCRETE
   B.) THE CLEAR DISTANCE TO THE ADJACENT OPENING OR OPENINGS IS 1'-0" OR MORE PARALLEL TO DECK SPAN AND 2'-0" OR MORE PERPENDICULAR TO DECK SPAN
2. SLAB REINFORCEMENT OR CHANNEL FRAMING IS REQUIRED FOR OPENINGS THAT DO NOT SATISFY NOTE 1
3. MULTIPLE OPENINGS THAT DO NOT SATISFY THE SPACING REQUIREMENTS OF NOTE 1 ARE TO BE CONSIDERED CLUSTERED OPENINGS AND SHALL RECEIVE CLUSTERED OPENING ADDITIONAL REINFORCEMENT. CLUSTERS SHALL BE TREATED AS ONE LARGE OPENING FOR SLAB REINFORCEMENT OR CHANNEL FRAMING
4. PROVIDE REINFORCEMENT SHOWN OR PROVIDE REINFORCEMENT BARS TO COMPENSATE FOR SLAB REINFORCEMENT INTERRUPTED AT OPENINGS, WHICHEVER IS LARGER. ALL INTERRUPTED BARS IN EACH DIRECTION SHALL BE COMPENSATED BY ADDITIONAL BARS AT EACH SIDE OF THE OPENING EQUAL TO 1/2 THE INTERRUPTED AREA
5. ATTACH DECK TO CHANNELS (TYP)
6. IF SLEEVES ARE USED, THE SLEEVES ARE TO BE INSTALLED SUCH THAT STEEL DECK WILL BE CUT AT LEAST 7 DAYS AFTER PLACING OF CONCRETE



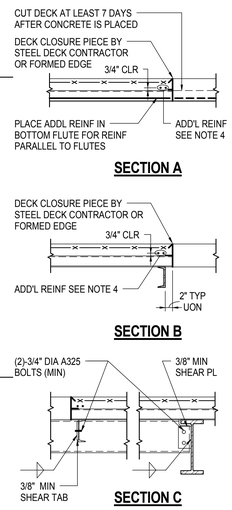
SLAB REINFORCEMENT

CHANNEL FRAMING



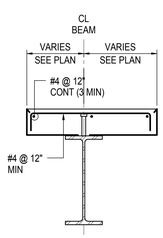
CLUSTERED OPENING ADDITIONAL REINFORCEMENT

NOTE: THE REINFORCEMENT REQUIREMENTS AT CLUSTERED OPENINGS ARE IN ADDITION TO THE REQUIREMENTS FOR SLAB REINFORCEMENT OR CHANNEL FRAMING.



TYPICAL COMPOSITE STEEL DECK AT OPENING

8 3/4" = 1'-0"

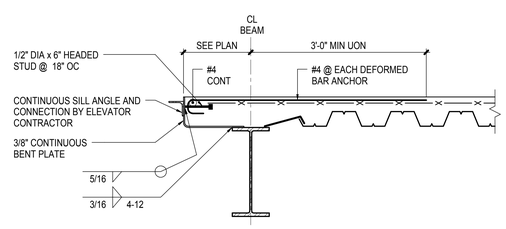


NOTE:

1. SEE TYPICAL COMPOSITE STEEL DECK AT SLAB EDGE (DECK PARALLEL CONDITION) FOR CANTILEVER PLATE, POUR STOP, AND REINFORCEMENT REQUIREMENTS

TYPICAL COMPOSITE STEEL DECK BETWEEN OPENINGS

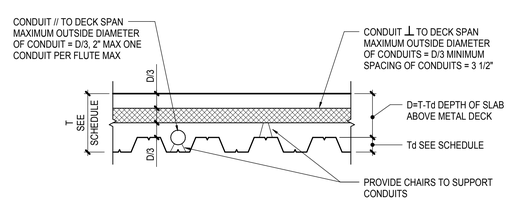
9 1" = 1'-0"



NOTE: SEE TYPICAL SLAB EDGE DETAILS FOR ADDITIONAL INFORMATION

TYPICAL ELEVATOR SILL DETAIL

10 1" = 1'-0"



TYPICAL DETAIL OF EMBEDDED CONDUITS IN SLAB

11 1" = 1'-0"

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CHICAGO, ILLINOIS
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PROJECT NORTH

REV. NO.	DESCRIPTION	BY	APVD	DATE
	ISSUED FOR CONSTRUCTION			07/03/12

Argonne NATIONAL LABORATORY

FMS
Facilities Management Services

PROJECT TITLE: ADVANCED PROTEIN CRYSTALLIZATION FACILITY, ARGONNE NATIONAL LABORATORY

PROJECT NO: C10539.00

DRAWING TITLE: TYPICAL COMPOSITE AND STEEL DECK DETAILS

DESIGNED: Designer	A/E CADD FILE: S5.3.2	FACILITY NO(S)
DRAWN: Author	A/E DWG. NO.: S5.3.2	
CHECKED: Checker	CAD NO:	
PROJECT MANAGER: ANL - JESSE ADAMS	DWG STATE	
DATE - 08/31/11	BIND ORDER	

FACILITY DOCUMENT NUMBER: J446-101-W-
REV. NO.: S5.3.2

Plot Date: 6/27/2012 5:19:07 PM