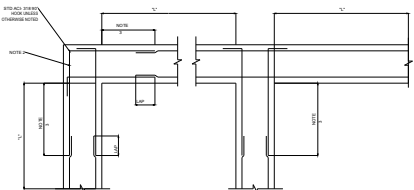


SINGLE REINFROMENT MAT



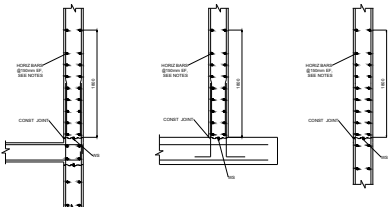
DOUBLE REINFROMENT MAT

NOTES:

- WHERE SHOWN ON PLANS, ADDITIONAL HORIZONTAL WALL CORNER AND INTERSECTION REINFORCEMENT SHALL BE ALTERNATED WITH THE TYPICAL HORIZONTAL REINFORCEMENT SHOWN IN THIS DETAIL.
- CORNER BARS SHALL MATCH SIZE OF TYPICAL HORIZONTAL REINFORCEMENT SHOWN IN SECTIONS.
- EXCEPT WHERE OTHERWISE SHOWN ON THE DRAWINGS, THE LENGTH INDICATED AS "NOTE 3" SHALL BE THE LESSER OF L/4, 3000mm OR 1.0 TIMES THE HEIGHT OF THE WALL, EXCEPT THAT IN NO CASE SHALL IT BE LESS THAN 6000mm.
- TYPICAL HORIZONTAL REINFORCEMENT SHALL BE LAPPED WHERE SHOWN OR AS INDICATED IN THE GENERAL INSTRUCTION NOTES.
- WHERE LAPPED BARS ARE DIFFERENT SIZES, USE THE LAP LENGTH REQUIRED FOR THE SMALLER OF THE TWO REINFORCEMENT BARS BEING SPLICED.

TYPICAL WALL CORNER & INTERSECTION REINFORCEMENT

0330-003



ELEVATED SLAB

AT BASE SLAB

AT INTERMEDIATE CONSTRUCTION JOINT

NOTES:

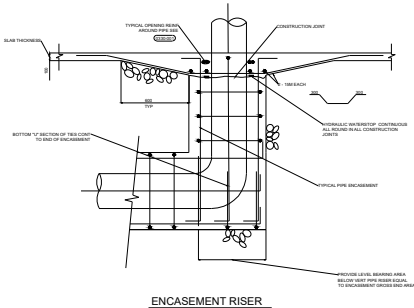
- PROVIDE HORIZONTAL BARS AT 150mm SPACING EACH FACE IN THE FIRST 1800mm ABOVE ALL HORIZONTAL WALL CONSTRUCTION JOINTS IN LIQUID CONTAINING AND BELOW GRADE STRUCTURES. WHERE TYPICAL WALL HORIZONTAL BARS ARE AT 300mm SPACING, PROVIDE ADDITIONAL BARS FOR 150mm SPACING.
- HORIZONTAL BAR SIZE FOR THE 1800mm ZONE SHALL BE THE TYPICAL WALL HORIZONTAL BAR SIZE SHOWN ON THE DRAWINGS OR THE MINIMUM BAR SIZE IN THE TABLE BELOW, WHICHEVER IS GREATER.

WALL THICKNESS mm	MINIMUM BAR SIZE
250	15M
300, 350	20M
400, 450	20M
500	25M

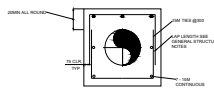
- PROVIDE CORNER BARS AT 150mm SPACING EACH FACE TO LAP WITH THE BARS SHOWN ABOVE, SEE 0330-003

REINFORCEMENT AT HORIZONTAL CONSTRUCTION JOINT

0330-004



ENCASUREMENT RISER



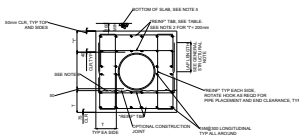
SECTION

NOTES:

- SECTION APPLIES TO PIPES W/ DIAMETERS 450mm AND SMALLER. FOR 500mm DIAMETER PIPES AND LARGER, SEE 0330-017
- WHEN PIPE ENCASEMENT IS CLOSER THAN 100mm TO SLAB ABOVE, TIE SLAB & ENCASMENT TOGETHER. SEE 0330-018

PIPE ENCASEMENT

0330-016

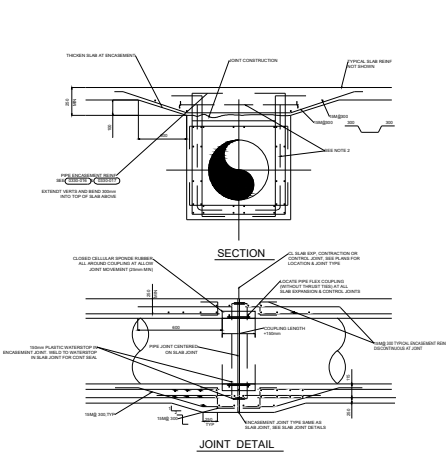


NOTES:

- THIS DETAIL APPLIES TO PIPE DIAMETER OF 500mm AND LARGER. FOR SMALLER THAN 500mm, SEE DETAIL 0330-016
- FOR "t">200mm REINFORCING SHALL BE ONE LAYER AND CENTERED IN SLABS OR WALLS. SIM 0330-016
- FOR ENCASMENT AT PIPE RISER SEE 0330-016
- "H" IS FILL HEIGHT OR WATER DEPTH OR COMBINATION ABOVE PIPE.
- WHEN PIPE ENCASMEN CLOSER THAN 100mm TO SLAB ABOVE, TIE SLAB & ENCASMENT TOGETHER. SEE 0330-016
- HYDROPHILIC WATERSTOP CONTINUOUS ALL ROUND IN ALL CONSTRUCTION JOINTS.

PIPE ENCASEMENT

0330-017

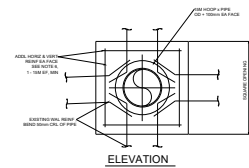


NOTES:

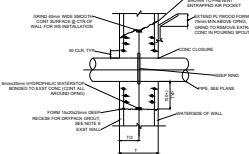
- TIE PIPE ENCASMENT TO SLAB AS SHOWN WHEN DISTANCE BETWEEN PIPE ENCASMENT AND BOTTOM OF SLAB IS LESS THAN 100mm.
- 150mm PLASTIC WS IN ENCASMENT JOINTS. WELD TO WS IN SLAB JOINTS. TOGETHER. SEE

PIPE ENCASMENT AT SLAB

0330-018

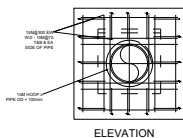


ELEVATION

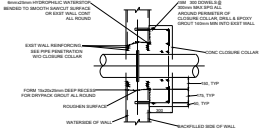


SECTION

TYPE 'A' - WITHOUT CLOSURE COLLAR



ELEVATION



SECTION

TYPE 'B' - WITHOUT CLOSURE COLLAR

NOTES:

- SAW-CUT 25mm DEEP x PIPE OD + 300mm SQUARE SCORE LINE ON EACH FACE OF WALL. (VERIFY DEPTH OF CUT TO CLEAR REINFORCING). (INCREASE HEIGHT AS NOTED AT TOP ON WATERSIDE FACE FOR POURING.)
- CHIP TO REMOVE THE CONCRETE WITHIN THE SCORE LINE, WHILE PRESERVING THE EXISTING WALL REINFORCING.
- CUT EXISTING REINFORCING AT CENTER OF OPENING AND BEND TO CLEAR PIPE.
- GRIND 40mm WIDE x CONT SMOOTH SURFACE ALL AROUND THE OPENING AT CENTER OF WALL. CLEAN SURFACES AND BOND CONTINUOUS HYDROPHILIC WATERSTOP IN PLACE.
- INSTALL WALL PIPE. (COAT CONCRETE ENCASED PORTION OF PIPE WITH SPECIFIED COATING SYSTEM.)
- INSTALL ADDITIONAL REINFORCING EACH FACE. EACH SIDE. ABOVE AND BELOW PIPE. HORIZONTAL REINFORCING TO HAVE COMBINED AREA EQUAL TO AREA OF HORIZONTAL REINFORCING CUT. VERTICAL REINFORCING TO HAVE COMBINED AREA EQUAL TO AREA OF VERTICAL REINFORCING CUT.
- SOAK CONCRETE SURFACES AND WITHIN 15 MINUTES CAST CONCRETE CLOSURE. (CONCRETE CLOSURE MUST BE CAST BEFORE HYDROPHILIC WATERSTOP EXPANDS). FORM GROOVE ON ALL SIDES OF OPENING EXCEPT AT TOP ON THE POUR SIDE.
- CLEAN SURFACES OF FORMED GROOVE WITH POWER WIRE BRUSH OR SANDBLASTING AND DRY-PACK WITH NON-SHRINK GROUT AFTER NEW CONCRETE MIN 28-DAYS OLD.

PIPE PENETRATION - EXISTING WALL

0330-022