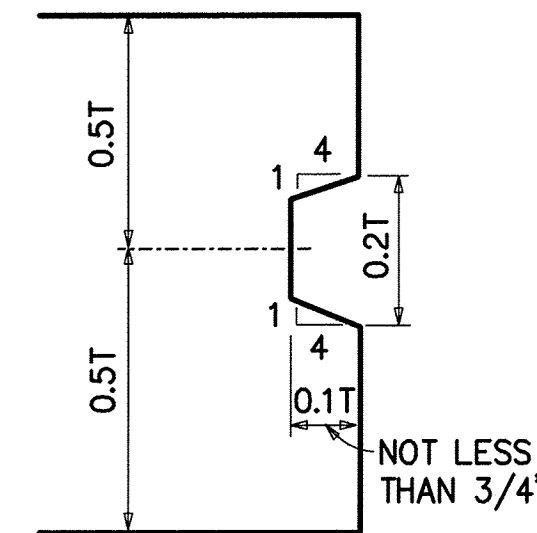
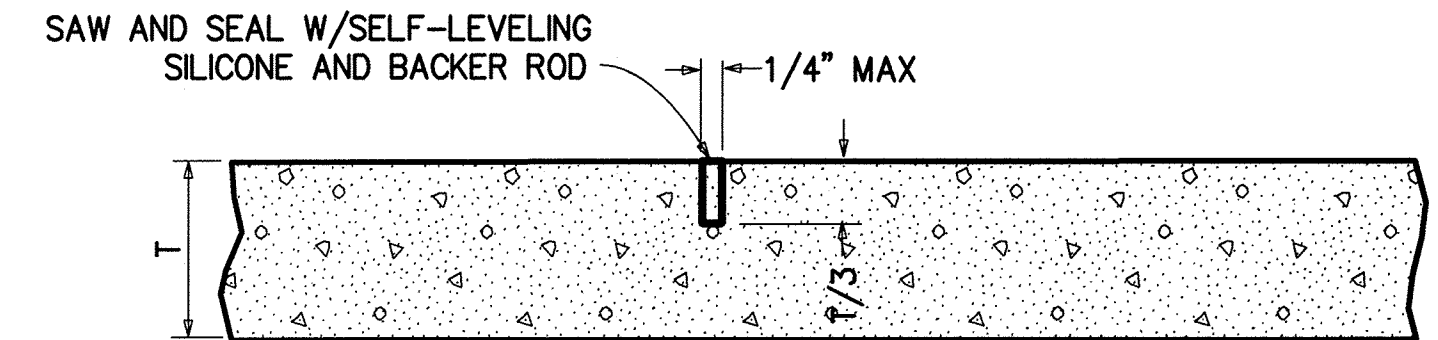


EXPANSION JOINT TREATMENT TABLE			
JOINT WIDTH ①	SEALANT RECESS DEPTH ②	SILICONE SEALANT THICKNESS ③	BACKER ROD DIAMETER ④
1/2"	1/4"	1/4"	5/8"
3/4"	1/4"	3/8"	7/8"
1-1/2"	1/2"	1/2"	2"

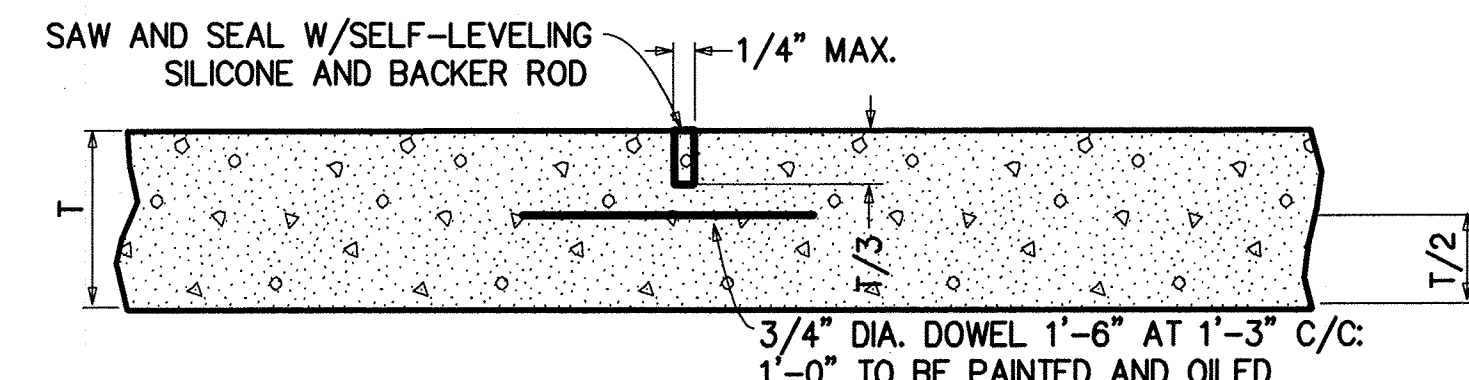
DETAILS FOR SEALED EXPANSION JOINT



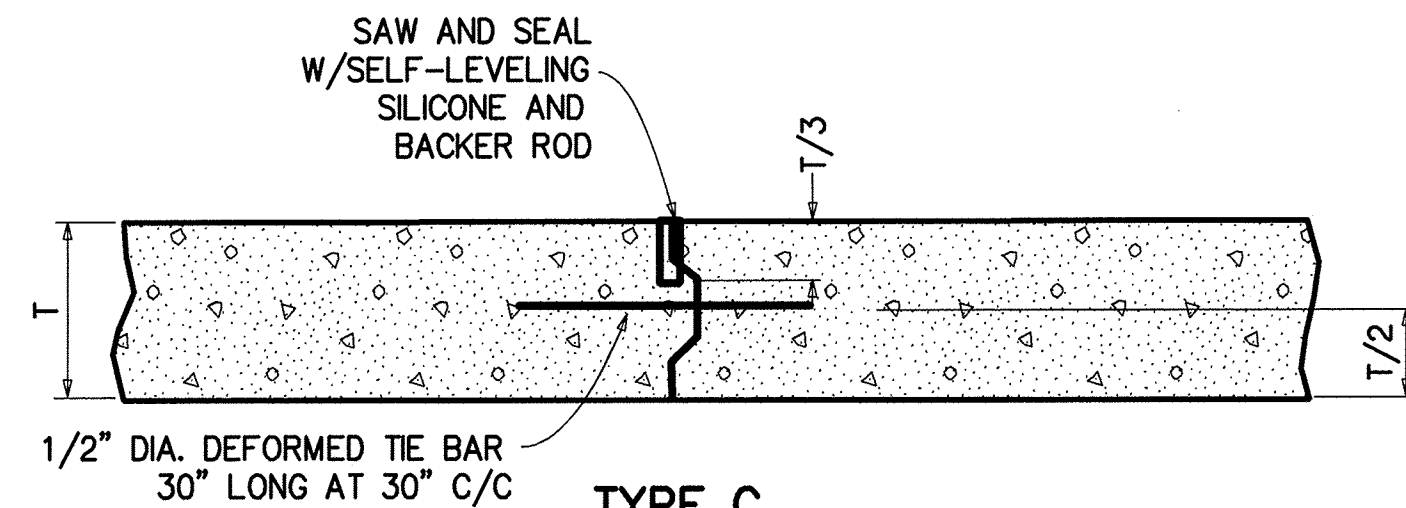
TYPICAL CONSTRUCTION JOINT



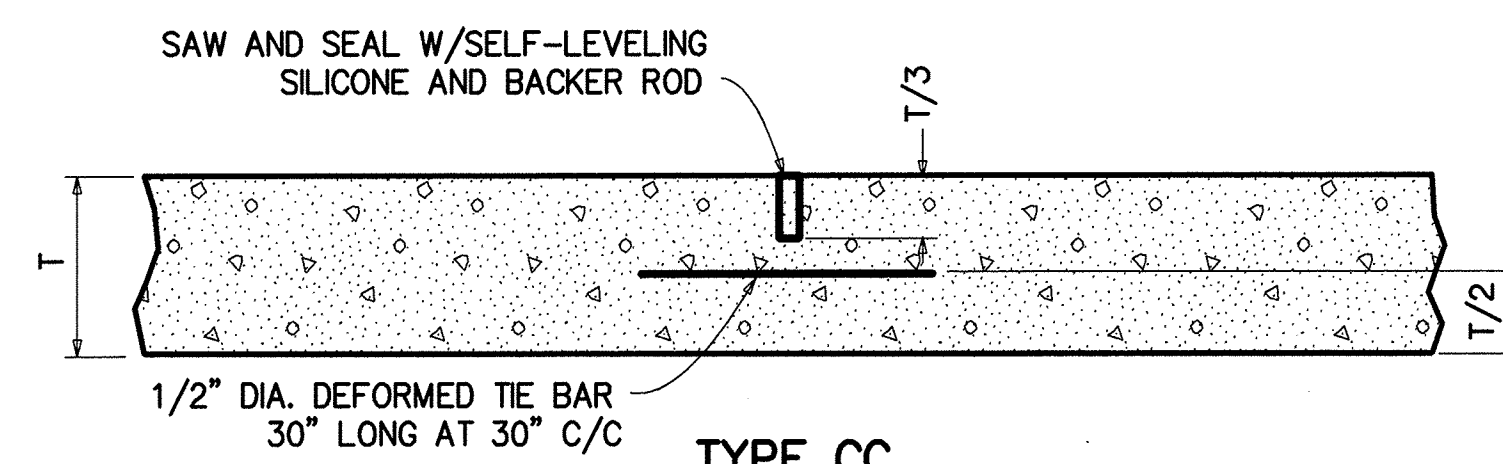
TYPE D
SAWED CONTRACTION JOINT



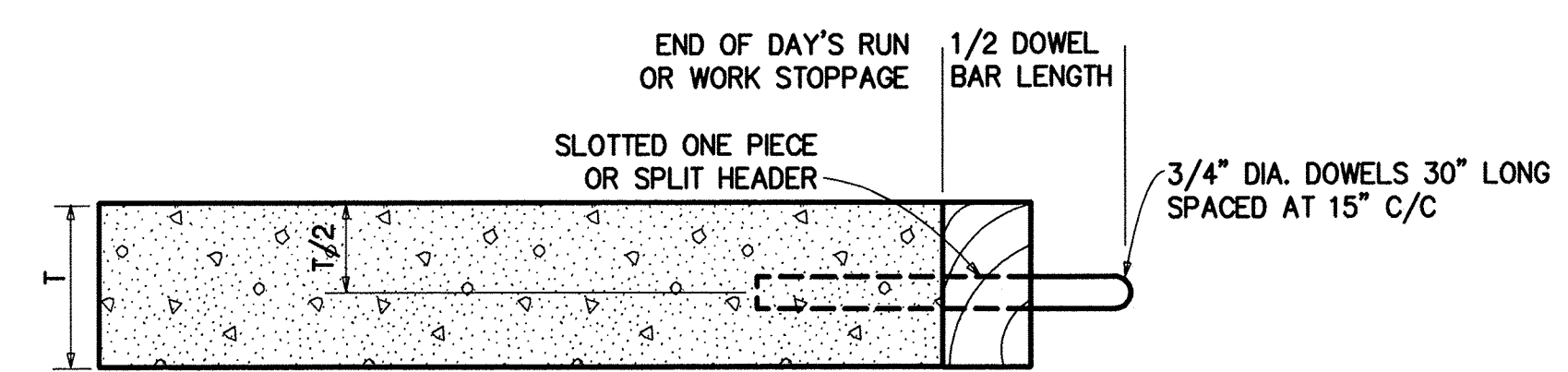
TYPE DD
SAWED DOWELED CONTRACTION JOINT (OPTIONAL)



TYPE C
LONGITUDINAL TONGUE AND GROOVE CONST. JOINT
NOTE: FOR CONTINUOUS POUR, USE TYPE CC

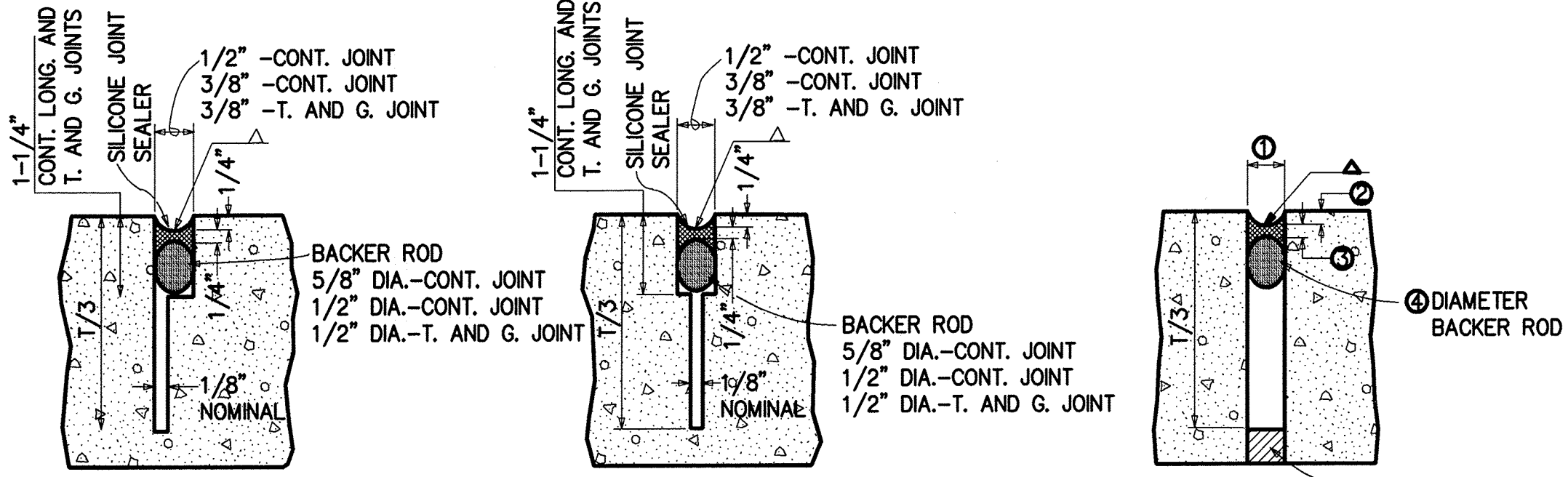


TYPE CC
OPTIONAL SAWED LONGITUDINAL JOINT
(IN LIEU OF TONGUE AND GROOVE CONST. JOINT)

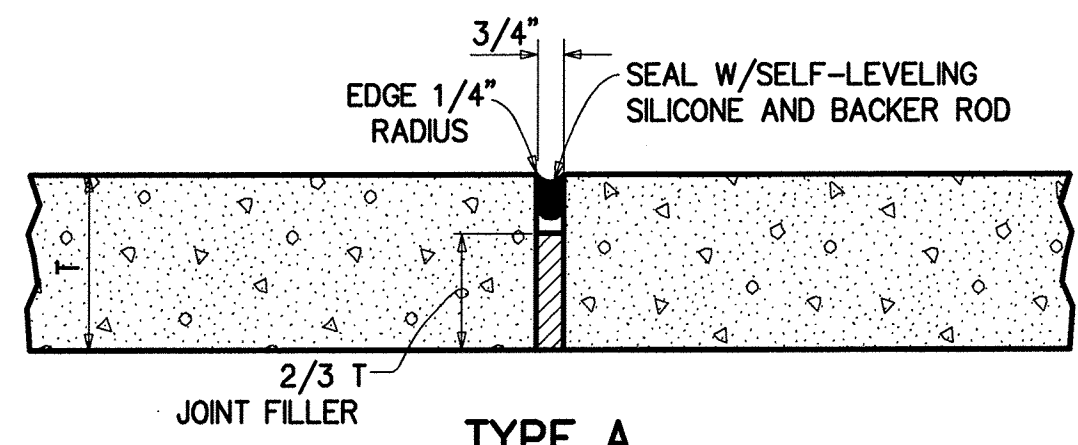


TRANSVERSE CONSTRUCTION JOINT
(TO BE USED AT END OF DAY'S CONCRETING)

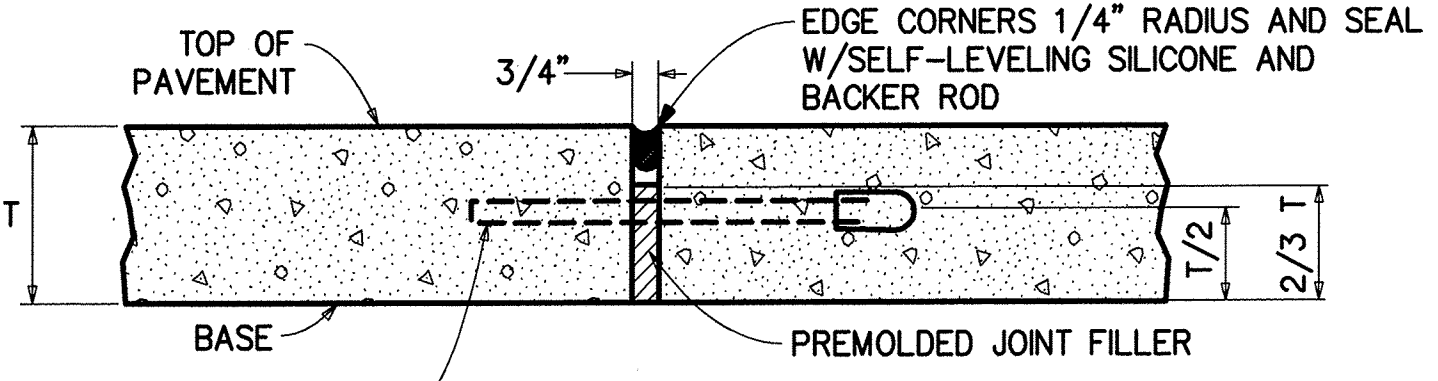
AFTER CONTINUATION OF CONCRETE POUR, THE CONST. JOINT SHALL BE SAWED AND SEALED AS SHOWN FOR OTHER JOINTS.



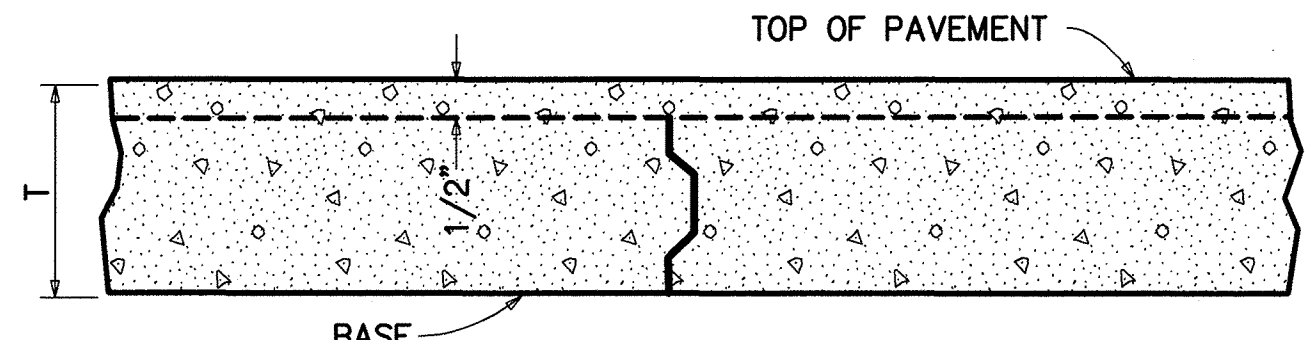
ALTERNATE DETAILS FOR LONGITUDINAL AND TRANSVERSE JOINTS
LONGITUDINAL TONGUE AND GROOVE JOINTS



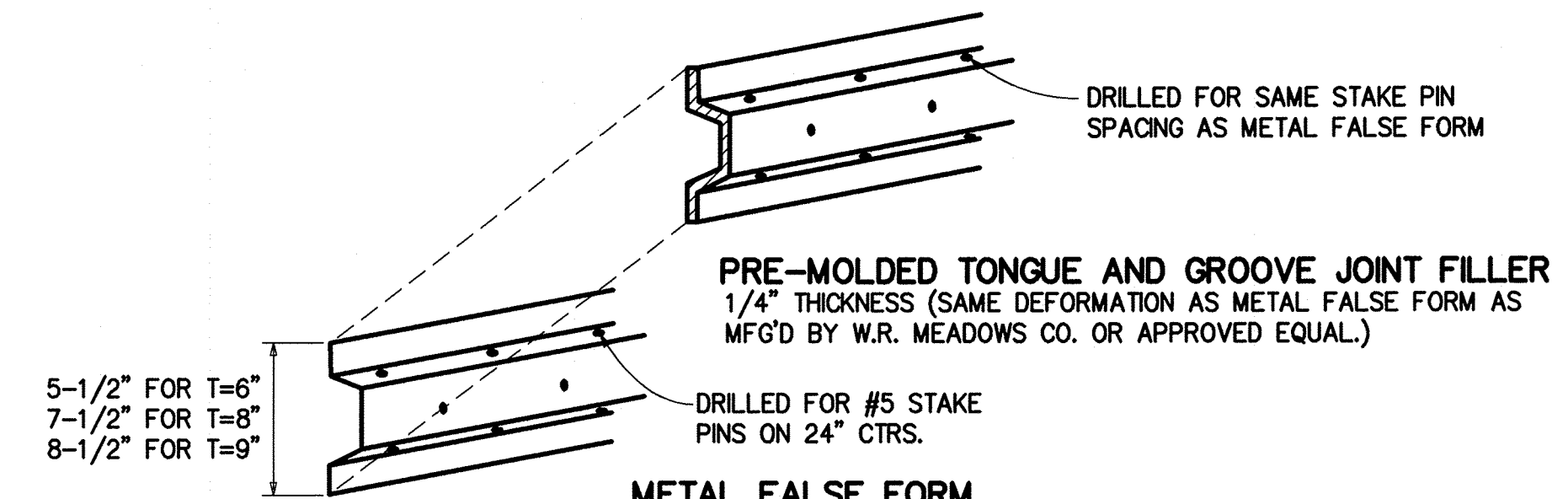
TYPE A
EXPANSION JOINT-3/4"



TYPE AA
EXPANSION JOINT
BASKET ASSEMBLY TO BE APPROVED PRIOR TO INSTALLATION.

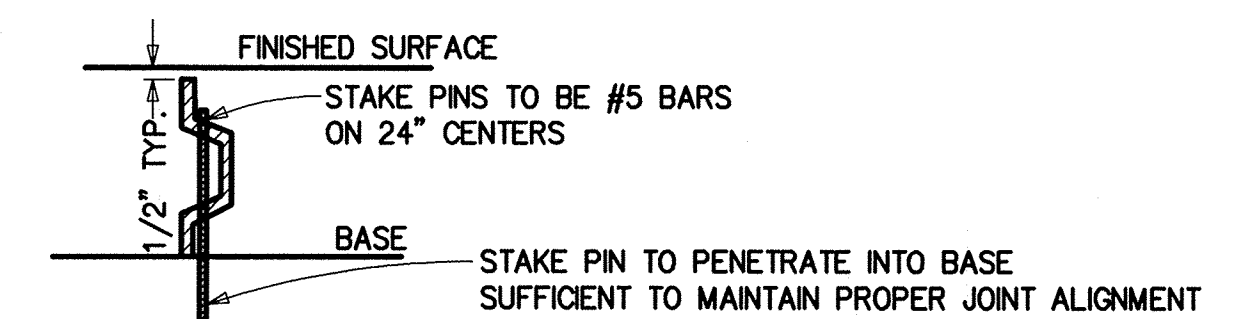


TYPE EE
CONCEALED METAL TONGUE AND GROOVE JOINT



METAL FALSE FORM

FALSE FORM TO BE 16 GAUGE MIN. THICKNESS METAL IN 10 FT. LAYING LENGTHS AS MANUFACTURED BY DAYTON SUPERIOR CORP. OR APPROVED EQUAL.



TYPICAL - TYPE E AND TYPE EE

JOINT DETAILS

GENERAL NOTES

ALL CONSTRUCTION AND MATERIALS REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ONLY SILICONE SEALANT MEETING REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS SHALL BE ACCEPTABLE FOR USE.

ALL JOINTS SHALL BE BLAST CLEANED WITH WATER. THE LOOSE PARTICLES SHALL BE BLOWN OUT WITH OIL-FREE COMPRESSED AIR. SURFACES MUST BE CLEAN, DRY, FROST-FREE, AND DUST-FREE DURING INSTALLATION OF BACKER ROD AND SEALER.

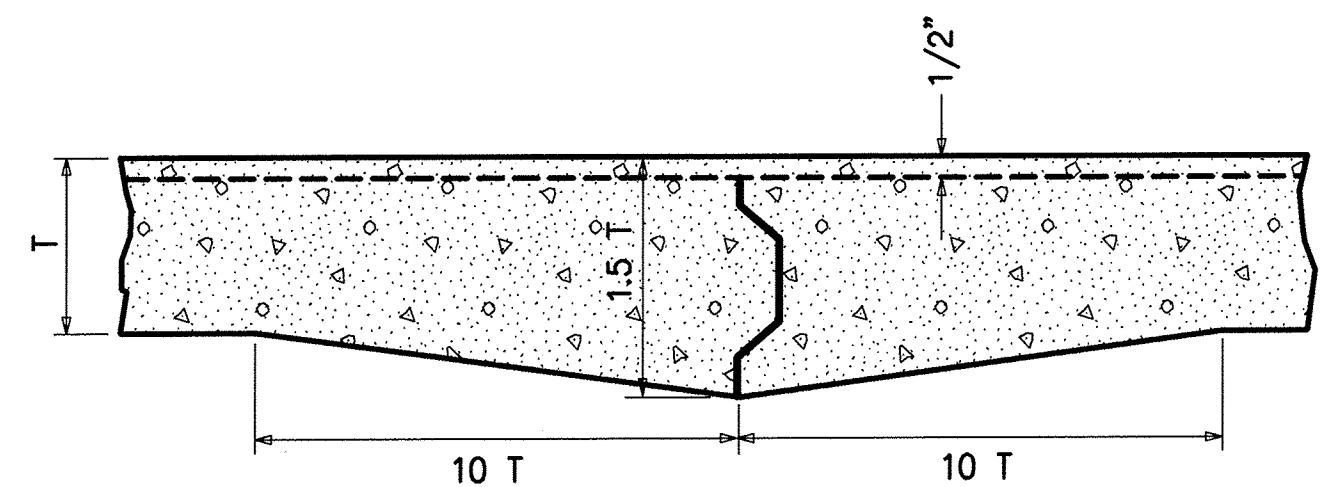
THE SHAPE FACTOR COMBINED WITH JOINT CLEANNES IS THE CRITICAL COMBINATION NECESSARY TO GUARANTEE DESIRED BONDING AND FUNCTION OF SEALED JOINTS. NO TOLERANCE EXCEPT THOSE SHOWN HERE WILL BE ALLOWED.

FEMALE KEY (NOTCHED PORTION) SHALL BE CONSTRUCTED ON THE FIRST POUR EDGE AT ALL TIMES ON SLIP FORM OPERATIONS. FEMALE KEYS WILL BE CONSTRUCTED ON BOTH EDGES.

THE JOINT SHAPE FACTOR IS DEFINED AS THE FINAL PRESSED SHAPE OF THE SILICONE MATERIAL. THE TOOLING OPERATION WILL FIRMLY PRESS THE FRESHLY APPLIED MATERIAL INTIMATELY AGAINST THE CUT SIDES OF THE RECESS AND THE BACKER ROD SURFACES. THE ROUNDED SHAPE ON THE TOP AND BOTTOM OF THE SILICONE ALLOWS THE SEALANT TO PROPERLY FLEX BUT MAINTAIN ADHERENCE TO THE PAVING.

NOTE:

- COST OF SAWING, DOWEL BAR ASSEMBLIES, JOINT FILLER, SEALER, AND STEEL SHALL BE INCLUDED IN UNIT PRICE BID FOR PCC PVMT.
- EXPANSION JOINT MATERIAL SHALL BE BITUMINOUS FIBER AND OF NON-EXTRUDING TYPE.
- REFER TO ODOT DRAWING LTU-2-2 FOR APPROVED LOAD TRANSFER UNITS AT CONCRETE PAVEMENT JOINTS.
- APPROVED TYPE DOWEL BAR ASSEMBLY MAY BE SUBSTITUTED FOR THE ASSEMBLY SHOWN WHEN APPROVED BY THE ENGINEER. UPON APPROVAL BY THE ENGINEER, THE SAME SHALL BE USED THROUGHOUT THE PROJECT.
- ANY DEVICE USED FOR SUPPORTING DOWELS SHALL HAVE SUFFICIENT RIGIDITY AND SO BE HELD IN DURING CONCRETE PLACEMENT THAT DOWELS WILL BE IN TRUE POSITION IN THE FINISHED PAVEMENT. ANY DEVICE NOT PRODUCING THE DESIRED RESULTS SHALL BE DISCONTINUED.
- PRODUCER AND CONTRACTOR SHALL AVOID PATENT INFRINGEMENT OF BASKET AND SHALL SAVE THE CITY HARMLESS IN THE USE OF ANY BASKET.
- DOWEL BARS SHALL HAVE A SHOP OR FIELD COAT OF ZINC CHROMATE FOR THE FULL LENGTH OF BAR AND SHALL HAVE A FIELD COAT OF M-70 ON THE FREE END (MIN. 1/2 LENGTH OF BAR).
- ALL TONGUE AND GROOVE CONSTRUCTION JOINTS SHALL HAVE A BOND BREAKER.
- ALL JOINTS TO BE SEALED WITH SELF-LEVELING SILICONE PER DETAIL.



TYPE E
CONCEALED METAL TONGUE AND GROOVE JOINT

REVISION	BY	DATE

[Signature]
CITY ENGINEER

[Signature]
DESIGN MANAGER

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT
CONCRETE PAVEMENT STANDARD
DETAILS FOR RESIDENTIAL
AND COLLECTOR STREETS
SHEET 2 OF 2
DATE: OCTOBER 2013