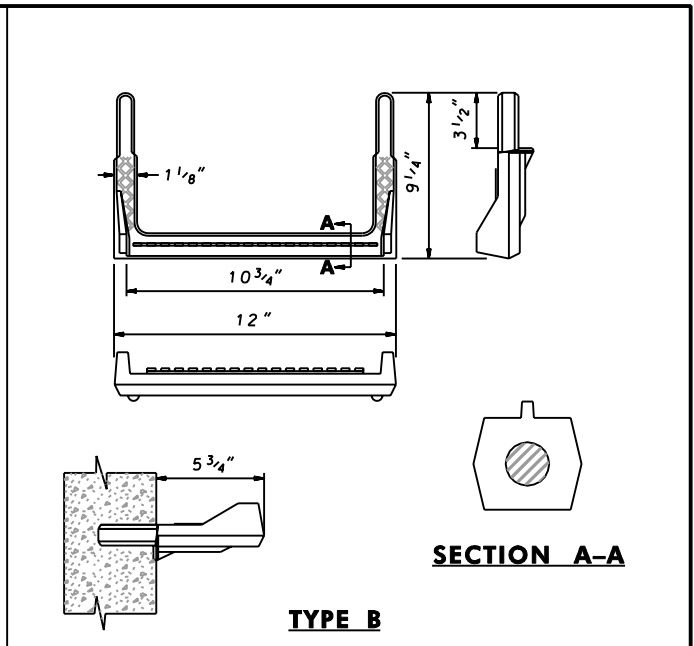


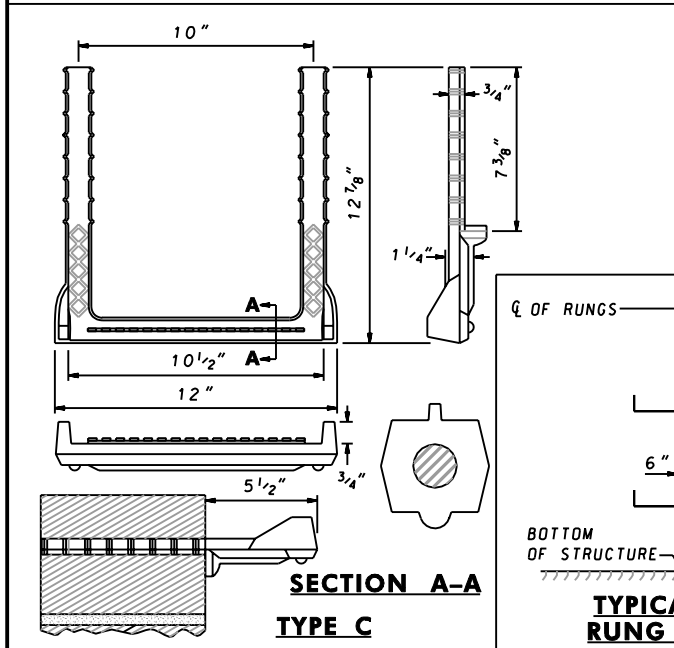
SECTION A-A

TYPE A



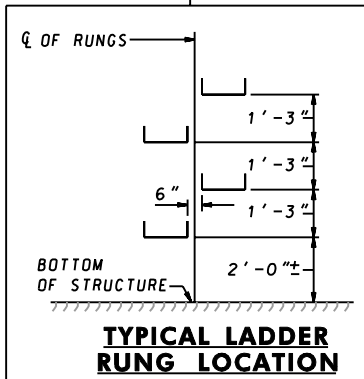
SECTION A-A

TYPE B

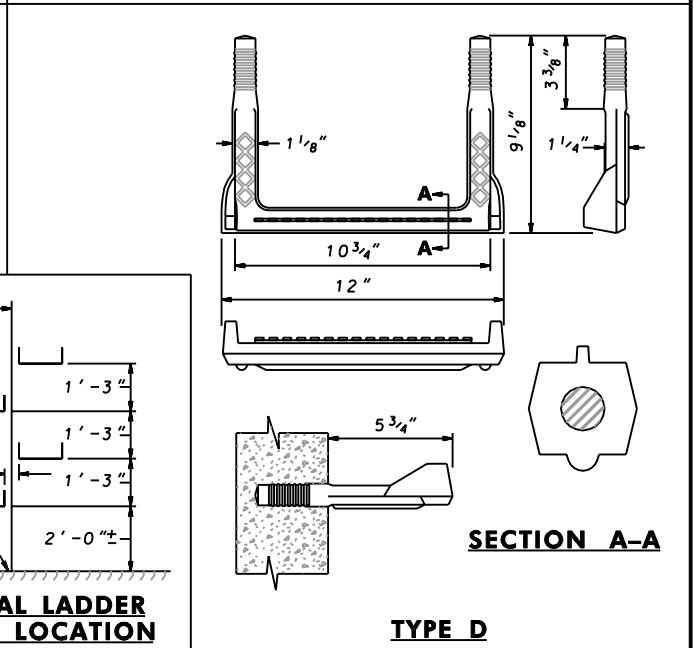


SECTION A-A

TYPE C



TYPICAL LADDER RUNG LOCATION



SECTION A-A

TYPE D

NOTES

1. TYPES A & B ARE TO BE DRIVEN INTO RECEPTACLES THAT ARE CAST INTO THE WALL.
2. TYPE C IS FOR BRICK AND BLOCK INSTALLATIONS.
3. TYPE D IS PRESS FITTED INTO PREFORMED CONCRETE HOLES.
4. LADDER RUNGS ARE TO BE USED IN INLETS, MANHOLES, AND JUNCTION BOXES OVER THREE FEET IN DEPTH OR AS DIRECTED BY THE ENGINEER. USED EITHER WITH BRICK OR CONCRETE CONSTRUCTION. (WHERE BRICK CONSTRUCTION IS EMPLOYED, THE MORTAR JOINTS SHALL BE ADJUSTED TO ACCOMMODATE LADDER RUNGS.)
5. COPOLYMER POLYPROPYLENE ENCAPSULATED 1/2 IN. DIA. STEEL REINFORCEMENT BAR. STEEL SHALL CONFORM TO ASTM 615 GRADE 60. COPOLYMER POLYPROPYLENE SHALL BE CERTIFIED BY THE MANUFACTURER TO CONFORM TO ASTM D 4101 AND HAVE A MINIMUM EXPOSED SECTION THICKNESS OF 1/8 IN.
6. SECTION A-A SHOWS 1/2" DIA. STEEL REINFORCEMENT BAR.
7. INSTALLATION SHALL CONFORM TO MANUFACTURER'S RECOMMENDATIONS.

SPECIFICATION	CATEGORY CODE ITEMS	
APPROVED	<i>Kirk G. McCall</i> DIRECTOR - OFFICE OF HIGHWAY DEVELOPMENT	
	APPROVAL • SHA REVISIONS	APPROVAL • FEDERAL HIGHWAY ADMINISTRATION
	APPROVAL 2-3-87	APPROVAL 3-30-87
	REVISED 10-1-01	REVISED
	REVISED	REVISED
	REVISED	REVISED

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
 STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
COPOLYMER POLYPROPYLENE STEEL
ENCAPSULATED LADDER RUNGS
MISCELLANEOUS STRUCTURES
STANDARD NO. MD 383.92