

## NOTES:

- STEPS SHALL BE STEEL-REINFORCED COPOLYMER POLYPROPYLENE PLASTIC CONFORMING TO:
  - ASTM D478 AND C497, EXCEPT THAT THE MINIMUM HORIZONTAL PULLOUT LOAD SHALL BE 6.7 kN (1500 LBS).
  - ASTM A615 GRADE 60 DEFORMED REINFORCING STEEL BAR.
  - CALIFORNIA CODE OF REGULATIONS TITLE 8, GENERAL INDUSTRY SAFETY ORDERS.
- STEPS SHALL BE CAPABLE OF WITHSTANDING AN IMPACT LOAD OF 95 N.m (70 FT-LBS) AT -7°C (20°F) WITHOUT CRACKING OR FRACTURING.
- THE MINIMUM TOTAL CROSS-SECTIONAL AREA OF THE EXPOSED PORTION OF THE STEP, INCLUDING THE DEFORMED STEEL BAR AND EXCLUDING THE NON-SLIP TREAD SURFACE, SHALL BE 645 mm2 (1.0 SQ IN).
- THE ENTIRE POLYPROPYLENE PLASTIC MATERIAL SURROUNDING THE REINFORCING STEEL BAR SHALL BE CAST MONOLITHICALLY. MINIMUM COVER SHALL BE 5 mm (3/16").
- A CERTIFICATION OF COMPLIANCE WITH THE REQUIREMENTS OF NOTES 1 THROUGH 4 PREPARED BY AN INDEPENDENT CERTIFIED LABORATORY SHALL BE SUBMITTED TO THE ENGINEER CONCURRENTLY WITH A REQUEST FOR APPROVAL.
- E = 86 mm (3-3/8"). FOR VAULTS AND MANHOLES, D = 140 mm (5-1/2"). FOR OTHER INSTALLATIONS, D = 190 mm (7-1/2"). THESE DIMENSIÓNS MAY BE PLUS OR MINUS 6 mm (1/4").
- STEPS SHALL BE EVENLY SPACED. MAXIMUM VERTICAL SPACING OF STEPS SHALL BE 400 mm (16"), WITH THE BOTTOM STEP A MAXIMUM OF 600 mm (2') ABOVE FLOOR OR SHELF.
- IF TAPERED STEPS ARE INSTALLED INTO STRAIGHT DRILLED OR FORMED HOLES, APPROVED NON-SHRINK GROUT SHALL BE INJECTED INTO THE HOLE PRIOR TO INSTALLATION. HOLES SHALL BE STRAIGHT AND PARALLEL. EXCEPT AS OTHERWISE NOTED, STEPS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED PROCEDURES.
- A DROP STEP WITH A MINIMUM DROP OF 19 mm (3/4") MAY BE USED. THE DROP STEP SHALL MEET ALL OTHER CRITERIA OF THIS PLAN.

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

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