

GUIDELINE FOR EXTERIOR STAIR HANDRAIL OR RETAINING WALL GUARDRAIL POST ANCHORAGE

The purpose of this guideline is to eliminate or at least limit the embedment of posts for railings of guardrails into horizontal concrete surfaces. In the past, the State has experienced a high percentage of failures of handrail/guardrail posts embedded in horizontal concrete surfaces. The preferred manner of anchorage is to apply a mounting plate to a vertical concrete surface and then attach the railing support to the mounting plate.

The details show solutions used to correct defective railing/guardrail post installations. Similar details should be used in new construction incorporating attachment of handrail/guardrail posts to vertical concrete surfaces.

The Curb.dwg detail shows two conditions at a concrete retaining wall. Detail 1/1 is a standard post installation and is to be used for most installations. Detail 2/1 is suggested to be used at building entrances or along primary paths of travel where it is desirable to restrict people from sitting on top of the curb. The Plate.dwg detail shows a post plate assembly surfaced mounted to the face of a stair riser. The post for the handrail is fastened directly to the post plate assembly. The Plate1.dwg shows a post plate assembly mounted to the stringer of the stairs. The Plate2.dwg shows a typical section of the post plate assembly anchored to a vertical concrete wall surface.

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