



ReDD® (Reduced Deflection Device)

PINNED CROSS-BOLT F-SHAPED CONCRETE TRAFFIC BARRIER – MASH TEST LEVEL 3



Northern Infrastructure Products

SWC30a

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## INTENDED USE

The Pinned Cross-Bolt F-Shape Concrete Traffic Barrier with ReDD (Reduced Deflection Device) is a MASH TL-3 system intended for installation along roadways where a low deflection portable concrete barrier system is required to provide positive protection. The system consists of 13-ft 1 ½-in [4.0 m] long by 32-in [815 mm] high by 23 5/8-in [600 mm] wide precast concrete cross-bolt F-shape traffic barriers with three pinning voids on each side of each barrier for insertion of a ReDD with a shallow embedment anchor into the three pinning voids on the traffic side. The shallow embedment anchors consist of ¾-in diameter by 12-in long high strength threaded rods (minimum tensile strength of 125 ksi) that are inserted through each ReDD into asphalt pavement or concrete pavement with adhesive to a depth of 6-in [151 mm], secured with a plate washer and nut above each ReDD. Minimum asphalt pavement thickness as crash tested was 3 ½-in [89 mm] over granular base. The maximum dynamic deflection of the system was 1-in [25 mm] during MASH Test 3-10 and 2-in [50 mm] during MASH Test 3-11, and Working Widths were 25-in [635 mm] and 26-in [660 mm] respectively.

## APPROVALS

The Pinned Cross-Bolt F-Shape Concrete Traffic Barrier has been fully tested in compliance with MASH, 2016 Test Level 3 and is determined eligible for reimbursement by the FHWA. FHWA Eligibility Letter B-365 dated June 6, 2022.

## CONTACT INFORMATION

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