

NCHRP Report 350 Rail System Type	MASH Test Level			
	TL-2	TL-3 TL-4	TL-4	TL-5
F-Shape	TL-2	TL-3 TL-4		TL-5
New Jersey	TL-2	TL-3 TL-4		TL-5
Single Slope	TL-2	TL-3 TL-4		TL-5
Vertical	TL-2	TL-3 TL-4		TL-5

**NCHRP 20-07 Global Equivalency: Solid Concrete**

		Test Level			
		TL-2	TL-3	TL-4	TL-5
<b>F Shape</b>		From F-Shape TL-3 in Global Equivalency (20-07 Task 395)	(20-07 global Equivalency) [TL-3 B-122 (32" Portable barrier anchored to bridge deck); TL-4 B-86a OR DOT 42" F-Shape Precast barrier]  Also: From NCHRP 20-07, Task 395: 32" F-shape ( WV, PA, VA, LA, OR, MA, ME, FL, WS, TX)	From NCHRP 20-07, Task 395: 42" F-shape (ME, FL, SW)	(20-07 Global Equivalency) [42" F-Shape] [FHWA Memo from May 30, 1997]  Also: From NCHRP 20-07, Task 395: 42" F-shape (WV, PA, VA, OK, MD, MA) From NCHRP 20-07, Task 395: 45" F-shape (IN)
<b>New Jersey</b>		2-10 = EA from 3-10 on 32" NJ 2-11 = EA from 3-11 on 32" NJ	3-10 = TEST 3-10: 32" NJ (NCHRP 22-14(3)) 3-11 = TEST 3-11: 32" NJ (NCHRP 22-14(3))	4-10 = TEST 3-10: 32" NJ (NCHRP 22-14(3)) 4-11 = TEST 3-11: 32" NJ (NCHRP 22-14(3)) 4-12 = EA from 4-12 on 36" Vertical	5-10 = TEST 3-10: 32" NJ (NCHRP 22-14(3)) 5-11 = TEST 3-11: 32" NJ (NCHRP 22-14(3)) 5-12 = TEST 42" NJ on MSE Wall (NCHRP 663)
<b>Single Slope</b>	<b>9.1°</b>	From TL-3 B45, Caltrans 9.1° slope	(20-07 Global Equivalency) [32" Caltrans 9.1° (B45)]  Also, 3-10 tested on 36" Caltrans SS Median barrier (9.1°)	EA from Caltrans on Type 836 and Type 842	(20-07 Global Equivalency) [Manitoba 9° (B-268)] =5-12 + [Caltrans 9.1°] [FHWA Memo from May 30, 1997]=5-10 & 5-11
	<b>10.8°</b>	From TL-3 Tests for TxDOT 10.8° slope	(20-07 Global Equivalency) [32" TxDOT SS 10.8°; 36" Tennessee 10.8°]  Also, 3-11 on 36" TxDOT SS [10.8°]	4-10 = EA from TEST 3-10 Caltrans on SS type 60 (9.1°) and EA from 32" NJ (NCHRP 22-14(3)) 4-11 = TEST 3-11 TxDOT Pan Formed (10.8°) 4-12 = TEST 4-12 TxDOT (10.8°)  From NCHRP 20-07, Task 395: 42" Single Slope (WV, PA, VA, LA, OK, MD, MA)	5-10 = EA from TEST 3-10 Caltrans on SS type 60 (9.1°) and EA from 32" NJ (NCHRP 22-14(3)) 5-11 = TEST 3-11 TxDOT Pan Formed (10.8°) 5-12 = EA from 5-12 on Vertical Faced (B-182)
<b>Vertical</b>		From TL-3 Tests and EA for Vertical	3-10 = EA from 5-10 on T224 3-11 = TEST 3-11 on 32" T221 (vertical on MSE)	4-10 = EA from 5-10 on T224 4-11 = TEST 3-11 on 32" T221 (vertical on MSE) 4-12 = TEST 4-12 on 36" vertical TxDOT	(20-07 Global Equivalency) [FHWA Memo from May 30, 1997] (20-07 Global Equivalency) Vertical Faced (B-182)  Also: 5-10 = EA from 5-10 on T224 5-11 = TEST 3-11 on 32" T221 (vertical on MSE) 5-12 = TEST 5-12 Vertical Faced (B-182)

**MASH Compliant Systems or under MASH Evaluation: Solid Concrete**