

NOTES:

- 1. VARIOUS DELINEATION OPTIONS ARE AVAILABLE.
- 2. 4F-T™ TO BE INSTALLED WITH A 4 FOOT FLARE, WITH NO RADII OR CURVING OF SYSTEM GUARDRAIL WITHIN SYSTEM.
- 3. SYSTEM REQUIRES SPECIFIC ASTM A325 BOLT/NUT COMBINATIONS TO BE TORQUED TO 100 lb-ft [135 Nm], ALL OTHER FASTENERS TO BE TIGHTENED SNUG.
- 4. REFER TO 4F-T™ ASSEMBLY MANUAL (628615) AND DWG SS-4380 FOR FULL DETAILS OF ASSEMBLY AND INSTALLATION.
- 5. PROPER SITE GRADING IS REQUIRED.

4F-TTM (**4-Foot Flared TREND**® Terminal)



| SEWxx | |
|-----------|-----------|
| SHEET NO. | DATE |
| 1 of 2 | 1/30/2024 |

INTENDED USE

The 4-Foot Flared TREND® Terminal ("4F-TTM") is a single-sided, flared, redirective/gating, energy-absorbing terminal/system for use with various longitudinal highway barriers, in either unidirectional or bidirectional applications, to include roadside, and shoulder applications. It is suitable for use as either an approach or departure terminal.

FEATURES

The 4F-TTM has a System length of 34' 4-1/2" [10.48 m], measured from the center of post one to the first (1st) splice location behind post nine. The 4F-TTM is to be installed at a height of 31" [787 mm] with a tolerance of +1" [25 mm], -0", measured from finished grade to top of rail. The impact head extends forward of the center of Post 1 by 10-3/4" [27.31 mm] and the system is flared, away from traffic, 4' [1.22 m] over its system length - relative to the downstream guardrail.

The 4F-TTM consist of one (1) Impact Head, one (1) Formed Ground Strut, one (1) Tension Cable, one (1) Hinged Breakaway Post ("HBA®") at Post 1 location (nominally embedded 6' 2-1/2" [1.89 m]), eight (8) Steel Yielding Terminal Posts ("SYTP®") at post locations two through nine (nominally embedded 3' 4" [1.01 m]), special Steel Spacer Blocks, Backing Plates and various other fastener and hardware components. Posts in position one through three utilize below-grade soil plates on the downstream side of the posts, for increased soil bearing resistance. Additionally, the System includes ten (10) proprietary 10ga W-Beam guardrail panels, of which eight (8) are slotted, one (1) is a Transition Panel (used at the downstream end of the System to attach to MGS) and one (1) is a welded Head Attachment Rail Panel. All nine (9) posts utilize a special Steel Spacer Block, one (1) of those special Steel Spacer Blocks (at post 2) provide a method to anchor the Tension Cable to the System. The special Steel Spacer Blocks add a 3" [76 mm] space from the face of each post to the back of each system panel. Backing plates are utilized at post locations two through nine.

All components of the 4F-TTM are galvanized and are specifically designed to be "universal", allowing the same set of components to be assembled on either side of the roadway, as well as utilized in trailing/departure end applications.

System installation height, as tested, was 31" [787 mm] with a tolerance of +1" [25 mm], -0".

SPECIFICATIONS

System Length: 34'-4 1/2" [10.48 m]

System Width (at Impact Head): 12" [305 mm]

System Height: 31", +1"/-0" [787 mm, +25 mm/-0 mm]

System Weight: ~1,220 lbs [~553 kg]

ELIGIBILITY

The 4F-TTM has been tested in conformance to MASH 2nd Edition (2016) with 2020 Errata Test Level 3 specifications and is eligible for Federal reimbursement by FHWA.

FHWA Eligibility Letter(s): [Report #] dated [Month Day, Year] for MASH 2nd Edition (2016)

Test Level 3. REFERENCES

American Association of State Highway and Transportation Officials (AASHTO), Manual for Assessing Safety Hardware (MASH) 2nd Edition (2016) with 2020 Errata.

CONTACT INFORMATION

15601 Dallas Parkway, Suite 525 Addison, TX 75001 Telephone: (888) 323-6374 www.valtir.com

4F-TTM (4-Foot Flared TREND® Terminal)

| SEWxx | |
|-----------|-----------|
| SHEET NO. | DATE |
| 2 of 2 | 1/30/2024 |

