

## Index 102-100 Series - Temporary Barrier

### Design Criteria

**Manual on Uniform Traffic Control Devices (MUTCD); Standard Plans, Index 102-600; FDOT Design Manual (FDM); AASHTO Roadside Design Guide (AASHTO RDG), 4th Edition; AASHTO Manual for Assessing Safety Hardware, 2016 Edition (MASH)**

### Design Assumptions and Limitations

#### A. General:

For the use of Temporary Barrier, see **Specification 102, Standard Plans, Index 102-600** and **FDM 215**.

**Index 102-100** provides requirements that are applicable to all types of Temporary Barrier (i.e., concrete, steel, and water-filled), except Low Profile Barrier. For Low Profile Barrier, see **Index 102-120**.

Trailer Mounted Barriers may be used to provide positive protection for workers within the work areas. APL drawings may be used as guide to develop project specific Temporary Traffic Control Plans that are signed and sealed by the Contractor's Engineer.

Based on project constraints, determine whether Temporary Barrier should be free-standing or anchored. This does not apply to Low Profile Barrier.

When calculating quantities for relocating Temporary Barrier, use free-standing or anchored according to the proposed condition of the Temporary Barrier. This does not apply to Low Profile Barrier.

**Index 102-110** shows Type K connections to permanent traffic railing (or barrier) shapes, such as Vertical Shape and F-Shape. Similarly, connections to the permanent single-slope traffic railing shapes are also permitted by following the *Thrie-Beam Guardrail Positioning Detail* and notes provided in the Index. Ensure that the permanent barriers include any applicable end transitions for their height and tapered toe width per the Standard Plans drawings. For connecting to the trailing ends of these traffic railings, follow the **Index 102-110** note for tapered traffic railing toes.

#### B. Shielding Hazards - Determining Begin/End Temporary Barrier Stations:

The standard method of determining Temporary Barrier placement for shielding hazards is based on the Runout Length and the Length of Need calculation in the **AASHTO RDG**.

See the FDOT 'Temporary Barrier Length of Need (LON)' program for additional information and assistance with determining Begin/End Temporary Barrier Stations for shielding various hazard configurations. The program is located under Design Tools on the **Standard Plans** website. Place barriers meeting the full calculated LON in unconstrained conditions.

For constrained conditions that prevent meeting the full LON, such as those required for median openings, side streets, or driveways, extend barrier to the farthest extent possible while providing for the safe movement of traffic. For taller barriers, follow requirements for Clear Sight Triangles per **FDM 212.11**. Use applicable end treatments or driveway layouts per the **Standard Plans** drawings.

For greatest redirective capacity, include a minimum length of 200 feet of temporary barrier in unconstrained conditions. Unless anchored (Type K barrier option only), extend temporary barrier installations a minimum of 100 feet past the work zone or hazard in unconstrained conditions. If constrained conditions are present, provide the maximum barrier length possible per above. For Type K barriers, any installation with a total length less than 200 feet must be anchored.

## Plan Content Requirements

Designate location(s) where Temporary Barrier is to be used along with installation requirements (i.e., free-standing, anchored, or Low Profile Barrier).

Do not specify the type of Temporary Barrier (i.e., concrete, steel, or water-filled) or components thereof unless otherwise required by the **Standard Plans** or **FDM** (e.g., drop-off criteria, setback requirements, etc.).

In the Structures Plans:

Show and label Temporary Barrier on the Construction Sequence drawings and other sheets as required. Show offsets to drop-offs, above ground hazards and adjacent lanes as appropriate.

In the Roadway Plans:

Show and label Temporary Barrier on the Temporary Traffic Control Typical Plans and other sheets as required. Show offsets to drop-offs, above ground hazards and adjacent lanes as appropriate.

## Payment

Item number	Item Description	Unit Measure
102- 71- 13	Temporary Barrier, F&I, Low Profile Concrete	LF
102- 71- 15	Temporary Barrier, F&I, Anchored	LF
102- 71- 16	Temporary Barrier, F&I, Free-Standing	LF
102- 71- 23	Temporary Barrier, Relocate, Low Profile Concrete	LF
102- 71- 25	Temporary Barrier, Relocate, Anchored	LF
102- 71- 26	Temporary Barrier, Relocate, Free-Standing	LF

See the **BOE** and **Specifications 102** for additional information on payment, pay item use and compensation.