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| Use on all projects with MSE walls |

**Section 255. — MECHANICALLY-STABILIZED EARTH WALLS**

**Material**

**255.02** Add the following:

Backfill material 704.03(a)

Geocomposite drain 714.02

Granular backfill 703.03(a)

Plastic pipe 708.04

Wall facing fill 705.08

**Construction Requirements**

**255.03 General.** Add the following:

Do not disturb existing ground until limits of wall installation have been verified and the CO has approved installation drawings.

Install reinforcement elements to within 2 inches (50 millimeters) vertically from the staked location.

Install wall drainage systems according to Section 605.

**255.04 Wall Erection.** Delete Table 255-1 and substitute the following:

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| **Table 255-1 Construction Tolerance** |
| **Facing Type** | **Vertical Tolerance(1)** | **Horizontal Tolerance(2)** | **Horizontal Straight Edge Point Check(3)** |
| Precast concrete panel, masonry block units | 0.5 inch(13 mm) | 0.5 inch(13 mm) | 0.75 inch(19 mm) |
| Welded wire, gabions | 1 inch (25 mm) mm) | 1 inch (25 mm) | 2 inch(51 mm) |
| 1. Wall vertical tolerance at top of wall for every 10 feet (3 meters) of wall height. For example, 65 feet (20 meter) wall height multiply 6.5×value.
2. Wall horizontal tolerance at top of wall for every 10 feet (3 meters) of wall height.

(3) Maximum horizontal deviation at a point in the wall from a 10-foot (3-meter) straightedge placed horizontally or vertically on the theoretical plane of the design face. |

**255.04 (b)** **Wire-faced.** Add the following:

Cut horizontal bench into original ground to a sufficient width to accommodate placement and backfilling of the top 3 reinforcement elements. Begin bench at centerline of proposed roadway or a minimum of 3 feet (1 meter) beyond the intersection of the original ground and the highest point of the wall excavation slope, whichever is the greatest distance from the wall face.

**255.05 Backfilling.** Delete the text and substitute the following:

Backfill the reinforced zone with the specified material according to Subsection 209.09. Place wall facing fill or unit fill as shown in the approved drawings. Place select granular backfill material from the back of the wall face, facing fill, or unit fill to the end of the reinforcement plus the additional width sown in the plans. Ensure that no voids exist below the reinforcement. Compact each layer according to Subsection 209.10, except use an acceptable lightweight mechanical or vibratory compactor within 36 inches (900 millimeters) of the wall face.

Consolidate wall facing fill or unit fill by rodding or other approved means to produce a uniform, tight facing fill. Place wall facing fill or unit fill in sequence with select granular backfill such that the top of the adjacent materials are within 6 inches (150 millimeters) of one another.

Where the stabilized volume supports spread footings for bridges or other structural loads, compact the top 5 feet (1.5 meters) to at least 100 percent of the maximum density.

Do not damage or disturb the facing or reinforcing elements. Do not operate equipment directly on top of the reinforcing mesh or strips. Place at least 6-inch (150 millimeter) loose lift of fill before operating rubber-tired equipment over the reinforcements. Limit equipment speeds to 5 miles per hour and limit turning maneuvers to a minimum. Install and maintain reinforcement taut, unwrinkled, and in full contact with the underlying surface. Correct damaged, misaligned, or distorted wall elements.

Backfill and compact behind the reinforced zone with the specified material according to Subsections 209.09 and 209.10. At the end of the day's operation, slope the last lift of backfill away from the wall face to direct surface runoff away from the wall. Do not allow surface runoff from adjacent areas to enter the wall construction area.

**Measurement**

**255.07** Delete the fourth paragraph.