FILLING PROCEDURES

PHASE 1:

1/3 h

PHASE 2:

2/3 h

PHASE 3:

ASSEMBLY:

1. Gabions and mattresses shall be lay flat on a hard surface. Rotate the gabion and mattress panels in position and join the edges with spiral fasteners for assembly. Wrap the ends of the spiral fasteners to reduce them in place.

2. Spikes shall be used in all edges of the gabions to assemble the gabion basket and mattress, and to join gabions to gabions. Therefore, when two gabions are placed side by side common panels shall be connected using a single spiral, place the gusset gabions or mattresses on the foundation and interconnect the adjacent units along the bottom, top, and vertical edges. Join spiral fasteners. Bottom and side panels shall be joined using spiral fasteners.

3. Interconnect each layer of gabions and mattresses to the underlying layer along the front back and sides.

4. Apply the top of the dampanion correctly and secure it with the rest of the carbon using spiral fasteners.

INSTALLATION AND FILLING:

1. Gabions shall be set to the line and grade specified in the construction drawings.

2. Gabions shall be connected together and aligned before filling with rocks. All connections (panel to panel, panel to basket) shall be already cut out as described in the assembly operations.

3. During the filling operation, smooth stone placement is required to minimize voids and give the exposed faces of normal structures a neat, flat, and compact appearance. The cells shall be filled in stages so that local deformation may be avoided. At no time shall any cell be filled to a depth exceeding 1 foot (300 mm) higher than the adjoining cell (See figure above).

4. Preferred rock fillers shall be used every 12 inches (305 mm) level for the 2 feet (24 in) or 300 mm higher. Fillers shall be placed across the corners of 12 inch (300 mm) from the corner forming diagonal bracing.

5. When gabion mattresses are specified for a steep slope, galvanized pipe shall be used for eave lines at 8 feet (1833 mm) centers or as necessary. Galvanized pipe shall be driven through the masonry bottom masonry at the top corners.

6. Rock filling shall be done at the bottom mattress flaps (or slope). Filling shall be done by unit, but unit or unit units shall be ready for filling at any one time.

7. Care shall be taken when placing the stone to assure that the PIC coating of gabions will not be damaged. Rocks shall not be machine placed from heights greater than 2 feet (610 mm) above basket.

8. Gabion placement shall be flush to front and back to back, so that pair of facing legs can be wired down in one process.

9. The last layer of stone shall be level with the top of the gabion to allow proper closing of the lid.

10. The lid shall be tightly secured along all edges, ends, and diagonal in the same manner as described for assembling. Adjacent legs may be wired down simultaneously.

11. All end wires shall be turned in. Every effort shall be made to manufacture and keep the units in a rectangular form.

ROCK SIZE SPECIFICATION:

1. Rock sizes for gabions may be produced by any suitable quarrying method and by the use of any device that meets the requirements below within the gradation limits specified.

2. Rocks shall be hard, angular to round, durable, and of such quality that they shall not disintegrate on exposure to water or weathering during the life of the structure.

3. Gabion baskets and mattresses 12 inches (305 mm) or greater in the vertical dimension shall be filled with rocks graded from large to small. Rocks shall have a minimum of 2 inches (51 mm) and a maximum of 2 inches (305 mm).

4. Carbon mattresses less than 12 inches (305 mm) in the vertical dimension shall be filled with rocks graded from large to small with top passing a 2-inch sieve and 15% retained on a 3-inch sieve. Gabions shall have a maximum dimension of 7 inches (178 mm) and a minimum of 2 inches (51 mm).

5. The rock size shall have a percent of wear not more than 4% when tested by ASTM T 83.

6. Carbon mattresses shall be lay flat on a hard surface. Rotate the gabion and mattress panels in position and join the edges with spiral fasteners.

7. Spikes shall be used in all edges of the gabions to assemble the gabion basket and mattress, and to join gabions to gabions. Therefore, when two gabions are placed side by side common panels shall be connected using a single spiral, place the gusset gabions or mattresses on the foundation and interconnect the adjacent units along the bottom, top, and vertical edges. Join spiral fasteners. Bottom and side panels shall be joined using spiral fasteners.

8. Interconnect each layer of gabions and mattresses to the underlying layer along the front back and sides.

9. Apply the top of the dampanion correctly and secure it with the rest of the carbon using spiral fasteners.

10. Gabions shall be set to the line and grade specified in the construction drawings.

11. Gabions shall be connected together and aligned before filling with rocks. All connections (panel to panel, panel to basket) shall be already cut out as described in the assembly operations.

12. During the filling operation, smooth stone placement is required to minimize voids and give the exposed faces of normal structures a neat, flat, and compact appearance. The cells shall be filled in stages so that local deformation may be avoided. At no time shall any cell be filled to a depth exceeding 1 foot (300 mm) higher than the adjoining cell (See figure above).

13. Preferred rock fillers shall be used every 12 inches (305 mm) level for the 2 feet (24 in) or 300 mm higher. Fillers shall be placed across the corners of 12 inch (300 mm) from the corner forming diagonal bracing.

14. When gabion mattresses are specified for a steep slope, galvanized pipe shall be used for eave lines at 8 feet (1833 mm) centers or as necessary. Galvanized pipe shall be driven through the masonry bottom masonry at the top corners.

15. Rock filling shall be done at the bottom mattress flaps (or slope). Filling shall be done by unit, but unit or unit units shall be ready for filling at any one time.

TABLE 4: ROCK SIZE SPECIFICATION

<table>
<thead>
<tr>
<th>UNIT HEIGHT</th>
<th>MINIMUM SIZE</th>
<th>MAXIMUM SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 in (152 mm)</td>
<td>3 inches (76 mm)</td>
<td>6 inches (152 mm)</td>
</tr>
<tr>
<td>9 in (229 mm)</td>
<td>gabions 12 inch (305 mm) or higher</td>
<td>4 inches (100 mm)</td>
</tr>
</tbody>
</table>

NOTES:

1. Gabions shall be lay flat on a hard surface. Rotate the gabion and mattress panels in position and join the edges with spiral fasteners.

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