Steel woven wire mesh netting is used as a drapery system to prevent rocks and debris from falling onto roads and railways. The mesh consists of Galmac coated double twisted steel woven wire with mechanical characteristics higher than the ones suggested in EN10223-3. The steel wire used in the manufacture of the mesh is heavily galvanized with Galmac, a Zn-5%Al alloy. Due to the characteristics of the double twist, the steel wire mesh can withstand the force of the falling rocks without unravelling in the event of wire breakage. The standard specifications for the wire-mesh are shown in Tables 2, 3, 4.

**Wire**

All tests on wire must be performed prior to manufacturing the mesh.

1. **Tensile strength:** the wire used for the manufacture of rockfall protection shall have a tensile strength between 380 - 550 N/mm² exceeding, in order to increase the tensile resistance of the finished products, as suggested in EN 10223-3. Wire tolerances (Table 4) are in accordance with EN10218 (Class T1).
2. **Elongation:** Elongation shall not be less than 10%, according to EN 10223-3. Test must be carried out on a sample at least 25 cm long.
3. **Galmac coating:** minimum quantities of Galmac shown at Table 4 meet the requirements of EN 10244-2 (Table 2 and Class A).
4. **Adhesion of Galmac:** the adhesion of the Galmac coating to the wire shall be such that, when the wire is wrapped six turns around a mandrel having four times the diameter of the wire, it does not flake or crack when rubbing it with the bare fingers, in accordance with EN 10244.
5. **Outwearing accelerated aging test** in a general condensation of moisture containing sulfur dioxide (28 cycles) according to EN ISO 6988 (without showing signs of red rust).

**P.V.C. (Polyvinyl Chloride) Coating**

The technical characteristics and the resistance of the PVC to ageing meet the relevant standards. The main values for the PVC material, according to EN 10245-2, are as follows:

- **Specific weight:** 1.30-1.35 kg/dm³ according to ISO 1183;
- **Hardness:** between 50 and 60 Shore D, according to ISO 868
- **Tensile strength:** higher than 21N/mm², according to ISO 527
- **Elongation at break:** not less than 200%, in accordance with ISO 527;
- **Colour:** grey-RAL 7037
- **Resistance to UV radiation:** After 4000 hours of exposure to UV light according to ISO 4892-2 or ISO 4892-3, the tensile strength and elongation at break can not be more variable than 25%.
Maccaferri reserves the right to amend product specifications without notice and specifiers are requested to check as to the validity of the specifications they are using.

1. Table of sizes

<table>
<thead>
<tr>
<th>Type</th>
<th>D (mm)</th>
<th>Tolerance</th>
<th>ø Wire (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6x8</td>
<td>60</td>
<td>+16%/4%</td>
<td>Int.2.2/Ext.3.2</td>
</tr>
<tr>
<td>8x10</td>
<td>80</td>
<td>+16%/4%</td>
<td>Int.2.7/Ext.3.7</td>
</tr>
</tbody>
</table>

All sizes and dimensions are nominal. Tolerances of D±1m of the length, and ±0 of the height shall be

Lacing Operations

Lacing operations can be made by using the tools shown in Fig. 5. Galmac coated steel rings having the following specification can be used instead of lacing wire (Figs. 3, 4):
• diameter: 3.0 mm
• tensile strength: 170 kg/mm².

Quantity Request

When requesting a quote, please specify:
• size of rolls (length x height, see Fig. 1),
• type of mesh,
• type of coating

2. Standard Mesh-Wire

3. Standard Wire Diameters

4. Wire tolerances and coating

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Figure 3

Figure 4

Figure 5