**Terminology**

**CALENDERING** - A rolling operation which flattens the knuckles of wire cloth, giving it a smoother surface.

**CRIMP** - Undulations in warp and fill wires, which hold each other in place.

**FILL WIRE** - AKA shute wire, wire running across the width of the cloth.

**FILTER CLOTH** - Cloth used for flattening or straining (primarily plain and twilled dutch wire cloth and certain specifications of square mesh and off-count standard wire cloth).

**HARDWARE CLOTH** - Plain weave square mesh cloth of relatively light wire galvanized after weaving (usually between 2 to 8 openings per lineal inch).

**MARKET GRADE** - Applies to wire cloth specifications, most commonly used for general work. Market grade cloth is made of one size wire for each size closed mesh.

**MESH** - Number of openings per lineal inch, measured from center of wire to center of wire.

**MICRON** - 1/1000 millimeter, 0.00003937 inch. The unit of measure for particle retention of filter media.

**OIL TEMPERED WIRE** - High carbon steel wire that is heat resistant to produce good strength and abrasion resistance.

**OPENING** - Dimension between parallel adjacent wires.

**RECTANGULAR MESH** - Wire cloth with different warp and fill wire mesh counts, which results in rectangular openings. The most common have a higher warp mesh than filter mesh. Advantages are increased open area, and reduced cost.

**SELVAGE** - The finished edges of wire cloth running the length of the roll, which are produced by the weaving operation.

**SPACE CLOTH** - Wire cloth specified by the opening size, rather than by the mesh count.

**SQUARE MESH** - Mesh with equal spacing of warp and shute to give square openings.

**WARP WIRE** - Foundation wires running parallel to the length of the cloth.

**WEAVES** - Pattern in which wires are interwoven.

**WIRE DIAMETER OR GAUGE** - Diameter of wire used in weaving cloth.

**PLAIN WEAVE**
Wires are crimped in a zig-zag fashion, with wires intersecting at every available crimp or pocket.

**INTERCRIMP**
Wires are crimped in a zig-zag fashion, with intersections at every 3rd, 5th or 7th, etc., crimp or pocket.

**LOCK CRIMP**
Distinct crimp or pocket at wire intersection, with straight connecting sections of wire.

**FLAT TOP**
Top surface of wires all lie in same plane. Irregular crimped surface on underside.
Stainless Steel Filters

Used in all kinds of filters, chemical, rubber and plastic products as well as automobile, decoration, building construction, etc.

Stainless Steel Filters in many configurations available.
PVC Wire Mesh

- PVC coated mesh for industrial, cage, and marine applications
- Coating on welded wire can handle intensive use without stripping or peeling
- Protective PVC coating makes PVC wire last many years longer than an uncoated wire
- Stocked colors are black, yellow and gray
- Custom colors available
Square Mesh Wire Cloth Specifications

1 MESH .063" GALVANIZED WELDED
2 MESH .041" GALVANIZED WELDED
2 MESH .063" GALVANIZED WELDED
4 MESH .025" GALVANIZED WELDED
2 MESH .041" PVC WELDED
2 MESH .120" SS WOVEN
Square Mesh Wire Cloth Specifications

- **4 Mesh .047" SS Woven**
- **6 Mesh .035" SS Woven**
- **6 Mesh .063" SS Woven**
- **8 Mesh .028" SS Woven**
- **8 Mesh .035" SS Woven**
- **10 Mesh .025" SS Woven**
- **10 Mesh .035" SS Woven**
- **12 Mesh .028" SS Woven**
Square Mesh Wire Cloth Specifications

1-1/2" Opening
.135 CS Intercrimp

4" Opening - .250 CS Intercrimp

1" Opening
.250 CS Lock Crimp

3" Opening - .250 CS Lock Crimp

2" Opening
.162 CS Lock Crimp

2" Opening
.375 CS Lock Crimp
# Square Mesh Wire Cloth Standards

## Specifications

<table>
<thead>
<tr>
<th>Diameter of Wire</th>
<th>Width of Opening</th>
<th>Percent of Open Area</th>
<th>Weights Per Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/32&quot; (0.80 mm)</td>
<td>0.07&quot; (1.78 mm)</td>
<td>31.2%</td>
<td></td>
</tr>
<tr>
<td>1/16&quot; (1.60 mm)</td>
<td>0.14&quot; (3.56 mm)</td>
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<tr>
<td>3/16&quot; (4.80 mm)</td>
<td>0.56&quot; (14.3 mm)</td>
<td>80.0%</td>
<td></td>
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<tr>
<td>1/4&quot; (6.40 mm)</td>
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## Weight Conversion Table

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## To Find the Weight of Wire Cloth

Multiply the Weight of Plain Steel by the following:

- Aluminum (50-56): 0.2417
- Brass (Brass): 1.0475
- Bronze, Commercial (Grade A): 1.1330
- Copper: 1.1335
- Stainless Steel (18-8): 1.0982
- Iron: 1.0823

## To Find the Weight of Wire Cloth in the material

Multiply the Weight of Plain Steel by the following:

- Molybdenum: 1.3985
- Nickel: 1.0445
- Nickel 200: 1.4485
- Titanium: 1.0575
- Silver: 2.5371
- Stainless Steel (18-8): 1.0982
- Titanium: 1.0575

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**Direct Metals**, Inc.

800.711.4939

www.directmetals.com
### WIRE CLOTH

#### SPACE CLOTH STANDARD SPECIFICATIONS

<table>
<thead>
<tr>
<th>Clear Opening Diameter or Wire Size</th>
<th>Steel Wire Diameter</th>
<th>Steel Wire Weight</th>
<th>Open Area</th>
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<tbody>
<tr>
<td>4.000 0.750 0 15/32 1/8</td>
<td>0.032 0.080 0.080</td>
<td>52.8% 37.2%</td>
<td>68.3%</td>
</tr>
<tr>
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**Note:** The table continues with similar entries for different sizes and specifications. The values in the table represent various dimensions, weights, and areas typically used in wire cloth specifications. The data includes clear opening diameters, wire sizes, and associated open areas, which are critical for applications requiring precise control of material flow, filtration, or separation. The values are rounded for practical application in various industries, such as manufacturing, construction, and engineering.
Wire Cloth Applications