WIRE CLOTH

PRODUCT CATALOG
800.711.4939 • info@directmetals.com
Terminology ................................................................. 1
Fabricated Filters ......................................................... 2
Decorative Mesh .......................................................... 2
PVC Wire Mesh ............................................................. 3
Cage/Crab Mesh ........................................................... 3
Square Mesh Wire Cloth Specifications .................. 4-6
Square Mesh Wire Cloth Standards ......................... 7
Space Screen Standard Specifications ................... 8
Applications ............................................................... 9
**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 filtering or straining (primarily plain and twilled dutch wire cloth with certain specifications of square mesh and off-count standard wire cloth).

**HARDWARE CLOTH** - Welded or woven square mesh cloth of relatively light wire galvanized after welding or 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 mesh.

**MESH COUNT** - 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 shute mesh. Advantages are increased open area and reduced cost.

**SELVAGE** - The finished looped 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.

**WEAVE STYLE** - Pattern in which wires are interwoven.

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

**WEFT OR SHUTE WIRE** - Wires running parallel to the width of the 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.

---

**APPENDIX**

<table>
<thead>
<tr>
<th>Approx. Diameter Inches</th>
<th>Gauge &amp; Wire No.</th>
<th>Washburn &amp; Moen Wire Gauge</th>
<th>Approx. Diameter Decimal</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/16</td>
<td></td>
<td></td>
<td>.438</td>
</tr>
<tr>
<td>5/16</td>
<td>0</td>
<td></td>
<td>.313</td>
</tr>
<tr>
<td>7/32</td>
<td>4</td>
<td></td>
<td>.225</td>
</tr>
<tr>
<td>13/64</td>
<td>5</td>
<td></td>
<td>.207</td>
</tr>
<tr>
<td>3/16</td>
<td>6</td>
<td></td>
<td>.192</td>
</tr>
<tr>
<td>11/64</td>
<td>7</td>
<td></td>
<td>.177</td>
</tr>
<tr>
<td>5/32</td>
<td>8</td>
<td></td>
<td>.162</td>
</tr>
<tr>
<td>9/64</td>
<td>10</td>
<td></td>
<td>.148</td>
</tr>
<tr>
<td>1/8</td>
<td>11</td>
<td></td>
<td>.120</td>
</tr>
<tr>
<td>7/64</td>
<td>12</td>
<td></td>
<td>.105</td>
</tr>
<tr>
<td>3/32</td>
<td>13</td>
<td></td>
<td>.092</td>
</tr>
<tr>
<td>5/64</td>
<td>14</td>
<td></td>
<td>.080</td>
</tr>
<tr>
<td>5/32</td>
<td>15</td>
<td></td>
<td>.072</td>
</tr>
<tr>
<td>1/16</td>
<td>16</td>
<td></td>
<td>.063</td>
</tr>
<tr>
<td>3/64</td>
<td>18</td>
<td></td>
<td>.047</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td>.041</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td>.035</td>
</tr>
</tbody>
</table>

**WIRE CLOTH**

800.711.4939

www.directmetals.com
Fabricated filters are used in all kinds of filters, chemical, rubber and plastic products. They are also commonly used in automotive, decorative, manufacturing and construction applications.

Fabricated Filters are available in many configurations.

- Versatile
- Economical
- Lightweight
- For use in any architectural, industrial, or commercial project
- Carbon steel, stainless steel, galvanized, aluminum, copper, brass, bronze and PVC coated
WIRE CLOTH

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, gray and custom colors are available

Stocked in galvanized before and after welding in both square and rectangular openings. Identifiable colors; white, black, green, yellow, orange and red.

FEATURES
- Heavy duty galvanized and PVC coatings
- Smooth rust resistant surface
- No snagging or cutting
- Meshes from 1/2" to 4" center-to-center and in wire diameters from .041” to .250”
- Lightweight and economical

COMMON APPLICATIONS
- Aviaries
- Chicken Wire
- Flooring
- Kennels
- Small & Large Animal Exhibits
- Netting
- Freshwater & Saltwater Traps

CAGE/CRAB MESH

800.711.4939

www.directmetals.com
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
WIRE CLOTH

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
.250 Wire CS Lock Crimp

www.directmetals.com
# WIRE CLOTH

## SQUARE MESH WIRE CLOTH STANDARDS

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Width</th>
<th>Height</th>
<th>Weight</th>
<th>Area %</th>
<th>Diameter</th>
<th>Width</th>
<th>Height</th>
<th>Weight</th>
<th>Area %</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.05mm</td>
<td>2.05mm</td>
<td>1.11mm</td>
<td>3.51mm</td>
<td>0.25%</td>
<td>1.97mm</td>
<td>2.05mm</td>
<td>1.11mm</td>
<td>3.51mm</td>
<td>0.25%</td>
</tr>
<tr>
<td>7.05mm</td>
<td>2.05mm</td>
<td>1.11mm</td>
<td>3.51mm</td>
<td>0.25%</td>
<td>1.97mm</td>
<td>2.05mm</td>
<td>1.11mm</td>
<td>3.51mm</td>
<td>0.25%</td>
</tr>
<tr>
<td>7.05mm</td>
<td>2.05mm</td>
<td>1.11mm</td>
<td>3.51mm</td>
<td>0.25%</td>
<td>1.97mm</td>
<td>2.05mm</td>
<td>1.11mm</td>
<td>3.51mm</td>
<td>0.25%</td>
</tr>
<tr>
<td>7.05mm</td>
<td>2.05mm</td>
<td>1.11mm</td>
<td>3.51mm</td>
<td>0.25%</td>
<td>1.97mm</td>
<td>2.05mm</td>
<td>1.11mm</td>
<td>3.51mm</td>
<td>0.25%</td>
</tr>
</tbody>
</table>

## WEIGHT CONVERSION TABLE

**WEIGHTS**: Standard weight in pounds per 100 sq. ft.

<table>
<thead>
<tr>
<th>Material</th>
<th>Density</th>
<th>Density</th>
<th>Density</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>1051</td>
<td>1051</td>
<td>1051</td>
<td>1051</td>
</tr>
<tr>
<td>Brass (C-2)</td>
<td>8.46</td>
<td>8.46</td>
<td>8.46</td>
<td>8.46</td>
</tr>
<tr>
<td>Bronze (C-15)</td>
<td>8.46</td>
<td>8.46</td>
<td>8.46</td>
<td>8.46</td>
</tr>
<tr>
<td>Nickel (C-17)</td>
<td>8.46</td>
<td>8.46</td>
<td>8.46</td>
<td>8.46</td>
</tr>
<tr>
<td>Copper (C-19)</td>
<td>8.46</td>
<td>8.46</td>
<td>8.46</td>
<td>8.46</td>
</tr>
</tbody>
</table>

To find the Weight of the Cloth in the metals below, multiply the Weight of the Metal by:

- **Aluminum**: 1.277
- **Brass (C-2)**: 1.277
- **Bronze (C-15)**: 1.277
- ** Nickel (C-17)**: 1.277
- ** Copper (C-19)**: 1.277

To find the Weight of the Cloth in the metals below, multiply the Weight of the Metal by:

- **Aluminum**: 1.277
- **Brass (C-2)**: 1.277
- **Bronze (C-15)**: 1.277
- ** Nickel (C-17)**: 1.277
- ** Copper (C-19)**: 1.277

**Contact Information**

- **Phone**: 800.711.4939
- **Website**: www.directmetals.com
<table>
<thead>
<tr>
<th>Diameter of Space or Wire</th>
<th>Opening of Rod Weight</th>
<th>Clear Diameter Steel</th>
<th>Inch</th>
<th>Inch Per Sq. Ft.</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8</td>
<td>0.032</td>
<td>0.43</td>
<td>63.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/32</td>
<td>0.054</td>
<td>0.79</td>
<td>56.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/32</td>
<td>0.063</td>
<td>0.88</td>
<td>52.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/128</td>
<td>0.065</td>
<td>1.01</td>
<td>49.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/16</td>
<td>0.105</td>
<td>1.51</td>
<td>37.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/64</td>
<td>0.120</td>
<td>2.07</td>
<td>33.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/8</td>
<td>0.148</td>
<td>3.76</td>
<td>29.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/32</td>
<td>0.177</td>
<td>5.08</td>
<td>26.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/32</td>
<td>0.207</td>
<td>6.97</td>
<td>24.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4</td>
<td>0.250</td>
<td>8.95</td>
<td>25.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/32</td>
<td>0.283</td>
<td>13.20</td>
<td>25.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/64</td>
<td>0.292</td>
<td>14.62</td>
<td>23.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/8</td>
<td>0.313</td>
<td>16.96</td>
<td>23.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/32</td>
<td>0.348</td>
<td>24.12</td>
<td>19.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4</td>
<td>0.438</td>
<td>34.68</td>
<td>17.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/32</td>
<td>0.504</td>
<td>45.89</td>
<td>14.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/32</td>
<td>0.576</td>
<td>59.70</td>
<td>12.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4</td>
<td>0.625</td>
<td>68.12</td>
<td>11.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/32</td>
<td>0.750</td>
<td>103.00</td>
<td>9.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4</td>
<td>0.792</td>
<td>107.28</td>
<td>8.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/32</td>
<td>0.888</td>
<td>116.22</td>
<td>7.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4</td>
<td>0.952</td>
<td>121.60</td>
<td>6.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The values shown are for WIRE CLOTH, which is a different specification from the one provided in the image. The values in the table are likely to be specific to a different product or application. For accurate information, please refer to the manufacturer's specifications or consult a credible source for WIRE CLOTH.
DIRECT METALS
COMPANY, LLC
3775 Cobb International Blvd.
Kennesaw, GA 30152-4390

PRESORTED STANDARD
US POSTAGE
PAID
DIRECT METALS
COMPANY, LLC

SPECIALIZED METAL PRODUCTS

CORPORATE HEADQUARTERS
3775 Cobb International Blvd.
Kennesaw, GA 30152-4390

Toll Free: 800.711.4939
Phone: 770.528.9001
Fax: 770.528.9002

CHICAGO LOCATION
3380 Grand Avenue
Waukegan, IL 60085

Toll Free: 800.711.4939
Phone: 847.599.0233
Fax: 847.599.0244
info@directmetals.com
www.directmetals.com