

## Ordering Wire Cloth

Wire cloth is a woven wire consisting of small openings and lightweight materials. A very versatile product, wire cloth is used in several industries:

- Food Processing – Filtration and separation
- Electronics, Computers & Communication – Microphone, speaker, ventilation fan screens, EMI/RFI shielding & glare control
- Construction & Architecture – Handrails, decorative components, pest control & security screens
- Farming & Agriculture – Filters & safety guards for farming equipment, livestock cages & crop process screens
- Pharmaceuticals & Medical Equipment – Sterilization baskets & trays, process screens, test sieves & centrifuge screens
- Environment Control – Air & water filters, filter media, ground water testing & waste treatment
- Transportation – Air, oil & fuel filters & strainers, grilles, trim, protective components & fuel cells
- Ship Building – Filters, strainers, vents & safety guards
- Aerospace & Aviation – Wind tunnel flow screens, fuel filters, RFI/EMI shielding & sound reduction components
- Gas, Energy, Oil Refining & Chemicals – Cathode screens, catalysts, mud screens, fuel cells & separator screens
- Consumer Products – Animal cages, heater & fan guards, filter & vent screens and infrared screens for ranges, microwaves & heaters
- Art

Direct Metals can weave to almost any specification.

1. Wire cloth can be fashioned out of several types of material:
  - Steel & Alloys – Carbon steel, stainless steel, copper, nickel, brass, bronze, gold, silver, titanium, aluminum, galvanized & coated steel, tantalum & more
  - Synthetics – Polyester, nylon, PVC, plastic & more
2. Wire cloth rolls, sheets & coils are available in incremental sizes:
  - Stock rolls are available in 24", 36", 48", 60", 72" & 96" of width and 100 feet of length
  - Wire cloth may also be cut to specific width & length guidelines
  - Getting customized wire cloth eliminates waste and reduces labor & handling costs
3. Wire cloth is woven in a variety of weave styles in order suit different project types & aesthetics. Choose from square or rectangular openings in:

- Twills
- Architectural weaves
- Cable weaves
- Dutch weaves
- Various combination & custom weaves

Direct Metals adheres to the highest standard for industrial woven wire cloth, ASTM E2016-99:

- We check the gauge dimensions, chemical make up and tensile strength prior to beginning the weaving process
- We check wire tension, opening size and mesh count during the weaving process, making sure the wire cloth matches to specification

When ordering wire cloth cut to size, include:

1. Quantity of pieces, exact part size and specified cutting tolerances (If ordering standard rolls, quantity and their widths suffice)
2. Mesh count or space opening (See 'Measuring Wire Cloth' below)
3. Wire diameter (See 'Measuring Wire Cloth' below)
4. Metal type (See metal types listed above)
5. Crimp type preferred on space cloth (See Glossary for crimp types)
6. Use of wire cloth (optional)
7. For rectangular wire cloth, state direction the slot is to run
8. Delivery date & shipping instructions
9. Type of certification required

### Custom Fabrication

Our quality control methods ensure our customers are completely satisfied with the wire cloth products we provide.

Direct Metals Company uses several state of the art fabrication methods in the creation of wire cloth products including:

- Cutting
- Brazing
- Shearing
- Soldering
- Stamping
- Drilling
- Blanking
- Welding
- Sawing
- Punching
- Rolling

- Slitting
- Laser, plasma & water jet cutting

We make custom baskets in several styles including:

- Rectangular
- Tilting
- Nesting
- Round
- Pivoting
- Compartment
- Dumping

Wire cloth baskets can be used for thousands of applications including:

- Heat treating
- Carburizing
- Annealing
- Nitriding
- Hardening
- Pickling
- Degreasing
- Washing
- Drying
- Plating
- Dichromating

When ordering baskets, trays & liners, include:

1. Quantity to be shipped
2. Current blue print or sketch including dimensional tolerances
3. Mesh count or space opening (See 'Measuring Wire Cloth' below)
4. Wire diameter (See 'Measuring Wire Cloth' below)
5. Metal type (See metal types listed above)
6. Use of wire cloth (optional)
7. Whether or not production samples are needed for approval
8. Maximum weight, handle type, finish or coating required
9. Date needed and shipping instructions
10. Type of Certification required

Besides baskets, we manufacture useful wire cloth products such as:

- Filters
- Strainers
- Burners

- Heating elements
- Flame guards
- Spark arresters
- Screen sections
- Sizing equipment
- Sifting equipment
- Shielding
- Sound reduction and microphone components

When ordering filters, strainers & other components, include:

1. Quantity to be shipped
2. Current blueprint or sketch
3. Mesh count or space opening (See 'Measuring Wire Cloth' below)
4. Wire diameter (See 'Measuring Wire Cloth' below)
5. Metal type (See metal types listed above)
6. Crimp type preferred on space cloth (See Glossary for crimp types)
7. Use of wire cloth (optional)
8. Details and specifications for any flanges or other components included as part of the finished product
9. Whether or not production samples are needed for approval
10. For rectangular wire cloth, state direction the slot is to run
11. Finish or coating required
12. Delivery date and shipping instructions
13. Type of certification, if required

#### Measuring Wire Cloth

- A wire cloth mesh opening greater than ½ inch is referred to as “space cloth”, while an opening less than ½ inch is called a “mesh count”
- Mesh count is determined by the number of openings in a linear inch measured from the center of one wire to a point one inch across
- In space cloth, the square opening between adjacent parallel wires is usually measured in inches or millimeters
- Wire diameter is the thickness of a single wire
- Filter cloth is a very strong, dense wire cloth with openings from 250 microns to 2 microns (1 micron = .0000394” = .001 mm). Filter cloth is used for ultra-fine filtration and sound suppression, and is utilized in several structural, decorative and electronic applications