Net Construction

Depth Chart – Chart for Mesh Depth to get 10 feet deep

Ratio of 29.3%; 33.3% (1/3); 50% (1/2) and 66.7% (2/3)

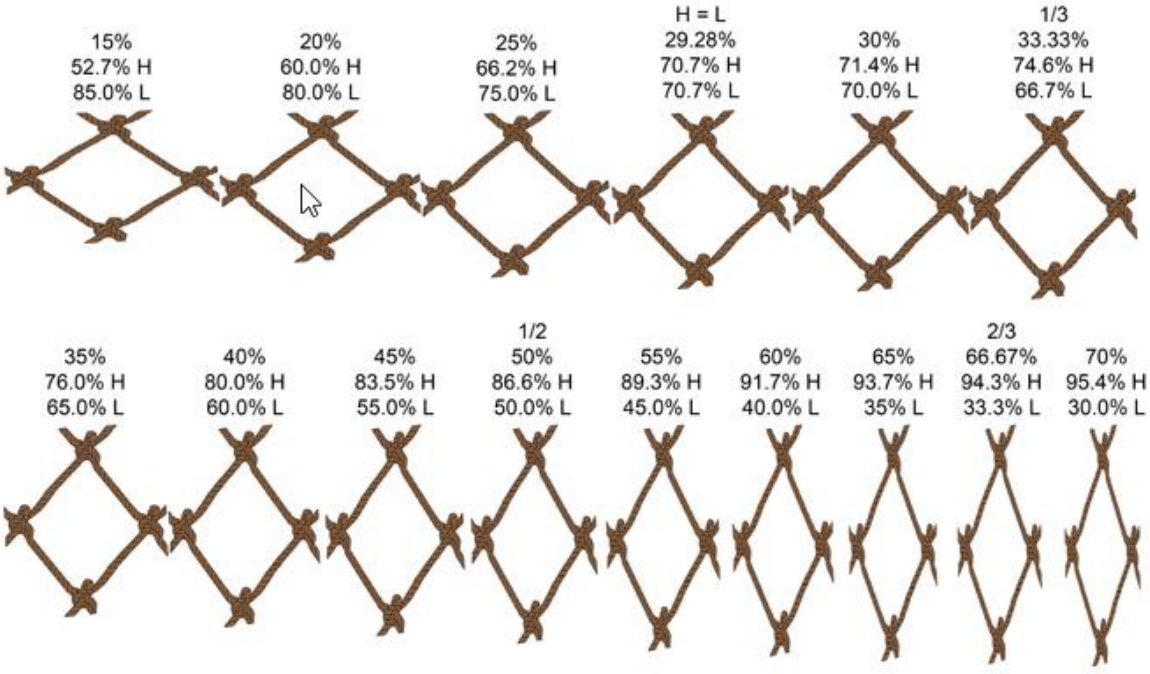
Stretched Mesh Square Mesh		1 3/4" Str. 7/8" Sq.	2" Str. 1" Sq.	2½" Str. 1 1/4 Sq.	3" Str. 1 1/3" Sq.	3 1/2" Str. 1 3/4" Sq.	3 3/4" Str. 1 7/8" Sq.	4" Str. 2" Sq.	5" Str. 2½" Sq.	6" Str. 3" Sq.	7" Str. 3½" Sq.	8" Str. 4" Sq.
Ratio	Height as % of Str Mesh	Mesh Deep to get 10 feet										
29.3%	70.7%	97	85	68	57	48	45	42	34	28	24	21
33.3%	74.6%	92	80	64	54	46	43	40	32	27	23	20
50.0%	86.6%	79	69	55	46	40	37	35	28	23	20	17
66.7%	94.3%	73	64	51	42	36	34	32	25	21	18	16

HOW TO READ CHART: Use the following formula to get other heights (widths)
Divide the mesh deep for 10' by 10 to get the mesh deep per foot. Multiply the mesh deep per foot by the disired depth to get mesh deep for prefered depth.

Example: If you need 1 7/8" square mesh 15 feet deep at 29.3% ratio.
Mesh deep from above chart for 10 feet is 45.
45 ÷ 10 = 4.5 mesh per foot
4.5 X 15 = 67.5 mesh deep for 15 feet deep

Hanging-Ratios

- When netting is attached to lines, it should be longer than the lines so as to have a proper looseness.
- This excess length is expressed as a percentage of the stretched netting. This is the hanging ratio.
- The formula for figuring the hanging ratio is stretched length of netting minus length of netting, divided by length of netting.
- Ratio % = (str length of netting less rope length)/str length of netting)
- The shape of mesh is greatly influenced by the hanging ratio.
- Multiply the stretch mesh size times the number of mesh deep times the % height to get the total height of net.
- Multiply the stretch mesh size times the number of mesh long times the % length to get the total length of net.



Sports Nets

Such as batting cages and backstops, it is best if the mesh is close to the same height and length with a ratio of 29.3%. If possible hanging ratio should be between 25% and 35%.

Gilling Type Nets

These are normally hung between 1/2 and 2/3 which is a hanging ratio of 50% to 66.7%. Generally, more is better, but over 70% will start to become too dark in the water

Mesh Per Tie

The following formula will tell you how long your ties should be to hang on 29.3%, 1/3 Basis, 1/2 Basis or 2/3 Basis.

1. Multiply the stretched mesh size times the number of mesh you wish to put on each tie. This will give you the total distance these mesh will stretch.

2. If you wish to hang on 29.3% ratio, multiply this by 70.7% to get your tie length. Note: This 29.3% ratio makes your mesh the same height and length.

3. If you wish to hang on 1/3 Basis, multiply this by .667 to get your tie length. (33.3% ratio)

4. If you wish to hang on 1/2 Basis, multiply this by .50 to get your tie length. (50.0% ratio)

5. If you wish to hang on 2/3 Basis, multiply this by .333 to get your tie length. (66.7% ratio)

Example:

3" sq. mesh = 6" str. Mesh - 8 mesh per tie

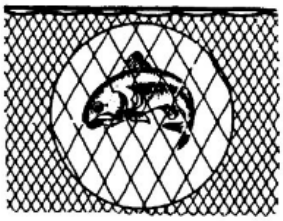
- 6" x 8 = 48" is the total distance the 8 mesh will reach.
- 48 x .707 = 34" ties for 29.3% ratio
- 48 x .667 = 32" ties for 33.3% ratio (1/3 Basis)
- 48 x .500 = 24" ties for 50.0% ratio (1/2 Basis)
- 48 x .333 = 16" ties for 66.7% ratio (2/3 Basis)

Monofilament vs. Nylon

As its name implies "Monofilament Netting" is netting that is made from a single filament string. "Multifilament Netting" is netting that is made from a string composed of many tiny filaments. In the fishing industry “Nylon” netting generally refers to multifilament nylon netting while “Monofilament” generally refers to Nylon monofilament netting. There is also a multi-mono netting where two or more monofilament strings are slightly twisted together before being made into netting.

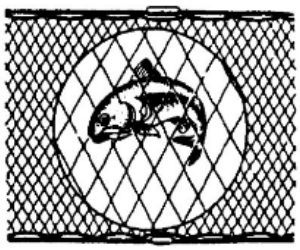
A tough decision for some fishermen is whether to use conventional multifilament nylon netting or monofilament nylon netting. Monofilament is also referred to, in the fishing industry, as Glass or Cat Gut netting. Each have some good features and each have some disadvantages. Multifilament nylon is more limp and will bag a fish a little easier than monofilament. This means a wider range of fish size in nets made of multifilament netting. Multifilament is harder to keep clean because sticks and cockleburs do hang in this type netting. Monofilament is not quite as strong as nylon, but in clear water, fish will hit the monofilament better because they can’t see it as well. Sticks and cockleburs will fall right out of monofilament netting just by shaking it. Since monofilament is a single strand, it is harder on your hands and more difficult to see when taking your fish out. To sum it all up, if you are fishing clear water, or having trouble with sticks and trash in your nets, a monofilament net will work better for you.

Flag Net



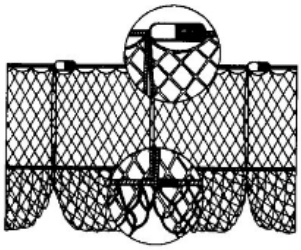
The least expensive type of gill nets is the Flag Net. This net is made of a single sheet of netting, that is suspended by a top string only and is allowed to sink into the water by its own weight. Thus, a flagging type appearance in the water. As this net has no bottom rope (and generally no floats), it is the most difficult of the gilling type nets to keep from rolling up in the wind or current. This net must be fished in still water when there is no wind. However, in the last few years, commercial fishermen have been returning to this type net in Monofilament netting, as monofilament does not roll as bad as the nylon netting.

Leaded Gill



The next step up from the flag net is the Leaded Gill. This is the same netting as is used in the flag nets, but a rope is used on top and bottom and it is customary for this to have floatrope and lead. The main disadvantage of this type net is that it is like a wall in the water and particularly in fresh water the fish will ease up to this net and then back off. It seems that most of the saltwater species of fish are more aggressive than the fresh water fish as they will generally take this type of netting better. *It is also ideal for Gar; either fresh or saltwater.*

Tie Down Gill Net



The next step above a leaded gill is the Tie Down Gill Net. A Tie Down Net is normally constructed the same as a leaded Gill with the addition of a string every 6 ft. that runs to the bottom of the net and is used to reduce the depth of the net by several feet. This forms slack or bag in the netting. So, when a fish eased up to this net, there will be some netting material loose in the water in which the fish may become entangled. *Dollar for dollar, yard for yard, we believe this is one of the best Gill Net purchases you can make.*

Note for history buffs: This type of gill net became very popular with fresh water fishermen in the 1960’s. Most fishermen originally referred to this type of gill net as a hobble net and in some areas it was called a goose net.

Trammel net

The most complex and expensive gill net is the Trammel Net. This is a 3 wall net. The lighter gill netting is sandwiched between 2 larger walls of netting. This means that wherever a fish runs into the net, he will make a bag around himself, even if he doesn’t gill as he would in the other type nets. To the fisherman, this means a wider range of fish size and a net that will catch and hold more fish. The Trammel Net is a favorite for many Commercial Fisherman.