

# **H** AVERFORD PTY LTD

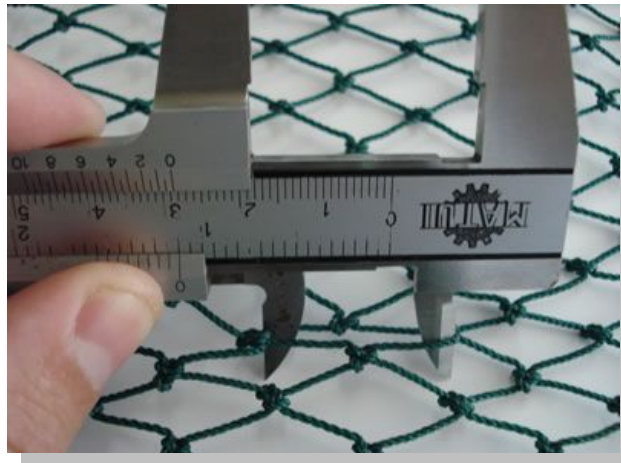
MANUFACTURERS, IMPORTERS, MERCHANTS SINCE 1888



DOUBLE DIAMOND Fishing Nets



HOLDFAST Fishing Tackle



## Netting Information Booklet

19 Grey St Carlton, NSW 2218

Ph: (02) 95881777

Fax: (02) 95884777

Email: [danielwinney@haverford.com.au](mailto:danielwinney@haverford.com.au)

[www.haverford.com.au](http://www.haverford.com.au)

**H**AVERFORD PTY LTD  
MANUFACTURERS, IMPORTERS, MERCHANTS SINCE 1888



DOUBLE DIAMOND Fishing Nets



HOLDFAST Fishing Tackle

## Netting Information Booklet

Haverford Pty Ltd have developed this booklet as an information resource for our customers. Its aim is to assist in the selection of netting that is most appropriate for your particular use. It also aims to explain new concepts in regards to netting such as measurement and common terminology.

Haverford was established in 1888, and now continues to supply quality **Double Diamond** netting Australia wide and abroad. Haverford is a family owned and operated company, with a combined experience of well over a 100 years in the industry. The company is now directed by Bob Winney and continues to supply a large range of netting used for:

- **Fishing – commercial and recreational**
- **Aquaculture**
- **Anti-Bird and Aviary netting**
- **Sports nets**
- **Hail Protection**
- **Decoration**
- **Cat and other animal enclosures**
- **Playground / Safety / Barrier netting**
- **Custom applications and general purpose**



Major jobs have included the supply of netting for the Sydney 2000 Olympic games, Expo '88 in Queensland, as well as supply to popular television shows Survivor and The Biggest Loser.

A large amount of netting is also exported to New Zealand and the Pacific Islands. Orders for **custom made** nets are welcome, with Haverford stocking a large range of netting accessories such as leads, floats, twine, net dyes and mending needles. The large range of product held in stock ensures prompt delivery.

Haverford supplies its netting products direct to the public, and our full range of products is now available for viewing on our recently constructed website [www.haverford.com.au](http://www.haverford.com.au)

We hope you find the following information useful when contemplating your netting options, and please do not hesitate to contact us for any further information or pricing.

The Haverford Team

# **Contents**

## **What types of nets do Haverford stock and what are their applications?**

- Knotless nylon
- Mono-Filament Nylon
- Multi-Mono Nylon
- Multifilament Nylon
- Polyethylene
- Braided Polyethylene
- Polyester / Teteron

## **How do we measure our nets?**

## **Net colours and dyes**

## **Netting accessories**

- Net Leads
- Net Needles
- **Net Floats**

## **Made up nets & Cutomised Orders**

- Prawn Drag Nets
- Cast Nets
- Slung Gill Nets
- Bait Nets
- Bait Nets
- Witches hats / Yabbie Traps / Lobster and Crab Pots

## **Delivery times**

## **Terminology**

## **Double Diamond Guarantee**

## What types of nets do Haverford stock and what are their applications?

### Knotless Nylon

Our knotless netting is popular due to its soft, yet high strength qualities. This netting, as the name suggests has no knots, which provides a soft-to-touch finish. This is a UV treated, multi-filament nylon net which ensures strength, outdoor usability and quality. Knotless is generally available in black, however in certain specifications it is available in brown and blue. It is generally constructed in a diamond mesh configuration and is available in a large variety of mesh sizes, plys, widths, and depths. Haverford supplies knotless netting by the metre, however discounts are generally applied to purchases of full bundles. Special orders are also taken for individual requirements subject to minimum quantities. Knotless netting is measured and supplied as a stretched bundle.

Common uses of knotless netting include:

- **Aquaculture** – soft and durable quality of the net coupled with the lack of rough knots ensures less damage to fish harvest.
- **Playground / Safety** – this strong netting is soft to touch which makes it a favourite for children's playground structures.
- **Golf practice cages** – suitable in the heavier plys, knotless ensures an extra strong practice net.
- **Cat enclosure netting** – This very soft material is popular for kittens and small enclosures



### Mono-Filament Nylon

Haverford stocks a huge range of mono-filament netting. They were introduced in the early 1970's and are composed of a high strength single strand nylon material, which are available in a wide range of sizes and colours. Mono netting is generally used by **professional fisherman**, however mono netting is often also found in commonly used bait nets and cast nets. Please note that mono netting is illegal for fishing use in NSW (including mono cast and bait nets). The Double Diamond mono nets Haverford stock are UV treated and are primarily available in the colours Smokey Grey, Clear and light green (other colours are also available on request and subject to minimum orders).

Haverford stocks mono netting in over 17 thicknesses, ranging from line 1.5 (0.25mm diameter) through to Line 90 (1.85mm). These thicknesses relate to the thickness of the net cord and correspond to various breaking strains of net. These range from 3kg right up to 107kg breaking strains, with the heavy gauges often used for catching large barramundi and shark. All Double Diamond nets are "double knotted" to ensure there is no knot slipping, and that the mesh sizes remain to their intended specifications.

Mono nets are always measured stretched mesh depth wise and are always sold only by the full bundle. Almost all Haverford mono nets are selvaged top and bottom using multifilament nylon netting. This assists the user in hanging the net to the rope, due to its 'grippier' feel. Mono nets are available in a large range of lengths, mesh sizes and depths, with special orders welcome subject to minimum quantities. Haverford also happily accepts requests for pre-hung nets with floats, rope and leads attached. Mono netting is very popular with fishermen in the Pacific Islands.

## Multi Mono Nylon

Multi-mono netting was introduced in 1975 as a softer alternative to single strand mono nets. Multi mono (as the name suggests) is simply a collection of several strands of mono cord. By using between 4 to 20 strands of thin mono cord, the result is a softer to handle netting, whilst maintaining high strength and usability. For use in NSW, multi mono nets must have a minimum of 7 strands.

For example: 0.5 x 8 (refers to 8 strands of 0.5 gauge line) or alternatively a fishermen may prefer 1.5 x 4 (4 strands of thicker 1.5 line)

All Double Diamond multi-mono netting is of the highest quality and comes double knotted, selvaged and UV treated. Multi mono nets are available in various colours including smokey grey, clear and light green. Multi-mono, as with mono netting, is primarily used by **professional fishermen** (gill nets etc). However, it is also commonly found in recreationally used cast nets, bait nets and even as a decorative netting.

Multi mono netting is also measured stretched depth wise and is only available as a full bundle purchase. Haverford also happily accepts requests for pre-hung nets with floats, rope and leads attached. Multi mono is also popular with fishermen in the Pacific Islands.

Special orders are happily taken subject to minimum quantities and availability.

## Multi-Filament Nylon

Multi-filament nylon netting was introduced in the 1960's and remains an economical netting option today. Although the introduction of multi-mono and mono netting has reduced the demand for multi-filament netting, it remains a popular option for:

- **Fishing nets**
- **Bird control netting**
- **Shark proofing net** – in the heavier plys
- **Household general purpose / decoration etc**

Multi-filament netting is a strong, UV treated netting. It is also a comparatively softer netting than other options. Haverford Double Diamond nylon nets have very tight, single knots.

One advantage of nylon multi-filament is that it is able to be dyed to almost any colour. These include white, black, brown, pink, blue etc.

This particular netting is available in a thickness range from 4ply (the lightest and thinnest) right through to 280ply (the thickest). It is available in a variety of lengths and depths, and is generally “double selvaged” top and bottom (has a double layer of twine of the same material top and bottom).

Multi-filament nylon is also supplied as tarred. This is achieved by applying a resin tar to the net which hardens, strengthens and increases the lifespan of the net. Tarred nylon netting is usually dyed black.

Haverford's Double Diamond nylon netting is also commonly supplied as a long tubular bundle, used commonly for crab witches hats and similar applications.

## Polyethylene

Polyethylene netting was introduced in the late 1960's and is an extremely popular and versatile netting type. Double Diamond polyethylene netting has many applications including the following:

- **Professional fishermen** : prawn trawls, cod ends, beach haul nets, deep sea drag nets.
- **Recreational fishermen:** landing nets, scoop nets etc
- **Sporting:** cricket practice nets, indoor sports centres, soccer nets, golf practice netting,
- **Safety:** playgrounds, crowd control, barrier fencing
- **Cat enclosures** and other animal containment systems
- **Bird and aviary applications** – light weight, yet high strength with mesh sizes from 1cm x 1cm
- **Decorative netting** and many other applications

Haverford P/E netting is long lasting, UV protected, and extremely tight knotted to ensure the integrity of the net over time. The netting is “double selvaged” – indicating that one row on the top and bottom of the net is double reinforced, to ensure higher strength at a nets weakest point. Polyethylene is also available in a **knotless** construction. This knotless polyethylene is commonly used for bird control and aviary applications, as well as for animal enclosures.

Polyethylene netting is generally available in both square and diamond mesh shapes. It is generally measured as a stretched lengthwise bundle, but from time to time can be measured depthwise. It is available in dark and light green, blue, orange and black, with other colours available on request.

The polyethylene nets are listed as:

For example: 400/9 2” 100 x 20

400 = denier or material / 9 = the ply or thickness / 2” = the stretched mesh size  
100 = the metres / 20 = the number of meshes deep

Polyethylene netting is a very popular type of netting used extensively throughout the community, so please don't hesitate to contact one of our staff to assist you with your enquiries.

## Braided Polyethylene

Braided polyethylene has similar qualities to normal twisted polyethylene however its twine is combined together as per a braid. This ensures a greater strength net, commonly used by **deep sea trawlers**. The braided twine has Compact Construction which restricts mud penetration and provides less drag. The distinctive combination of highest knot breaking strength and excellent abrasion resistance ,delivers durability and strength ensuring consistent performance of the trawl,voyage after voyage.



Braided netting is available in thicknesses ranging from 1.7mm to 2.5mm width and is available in a range of colours. These include orange/green, blue/yellow, orange and white. Haverford also import a brand new braided net which helps avoid algae / fungal build up on nets. Please contact us for more information on braided nets.

## **Polyester / Teteron Netting**

This particular netting is constructed from a polyester material, supplied in bright pink. The key attribute of this net is that it has little or no stretch in it. It is most commonly used in Victoria for whiting and flathead fishing. It is currently stocked in 6ply with mesh sizes ranging from 2-1/4" to 2-3/4".



### **Netting - Sydney Olympics 2000**

**Haverford Pty Ltd** were pleased to supply the Heavy-duty P/E netting required to support the "Aboriginal Wandjina" display at the Sydney 2000 Olympic opening ceremony.

The netting was specifically cut & sewn by net maker **Bob Martin**.

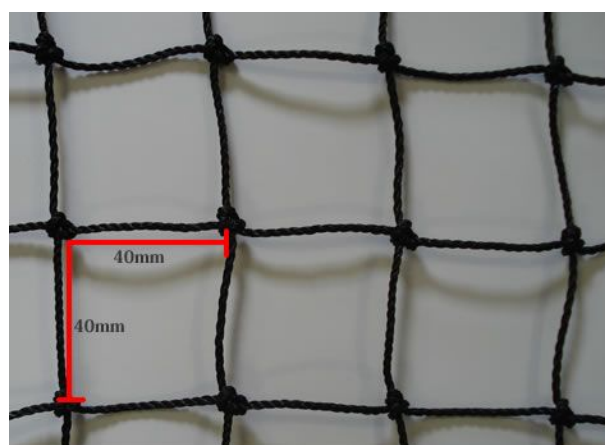
1200 square metres of netting was required, with the finished "flag" weighing over 380kg

## How do we measure our nets?

Different suppliers, net makers and industries measure and supply nets according to different specifications. This section outlines how Haverford measures and supplies its netting to help eliminate any confusion you may have and to assist in determining what size net you require. Please do not hesitate to discuss this with our sales team to ensure you receive the appropriate netting. For precise measurements, mesh size is measured from inside knot to inside knot.

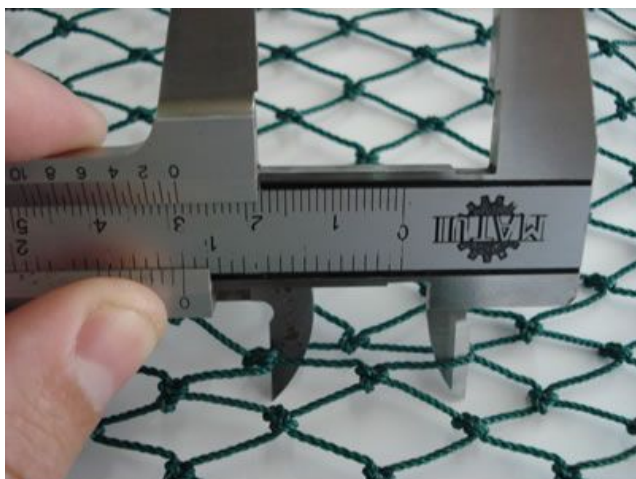
The most commonly asked question is with regard to MESH SIZE (the holes in the netting) and determining what size mesh it is you are actually after. Net mesh can be designed in two ways:

- **Square Mesh** – Mesh size measured this way refers to taking the distance from one CORNER KNOT to the next adjacent knot. For example if the mesh measures 40mm from knot to knot, then the mesh size could be described as 40mm square mesh size. Polyethylene sporting net is often supplied in this fashion.



Above is an example of square mesh netting.

This net would be described as 40mm square mesh, as it is the measurement between two of the adjacent knots.



The callipers are being used here to measure the STRETCHED mesh size of the same Polyethylene netting. Note the stretched mesh size is the distance between opposing knots when fully stretched.

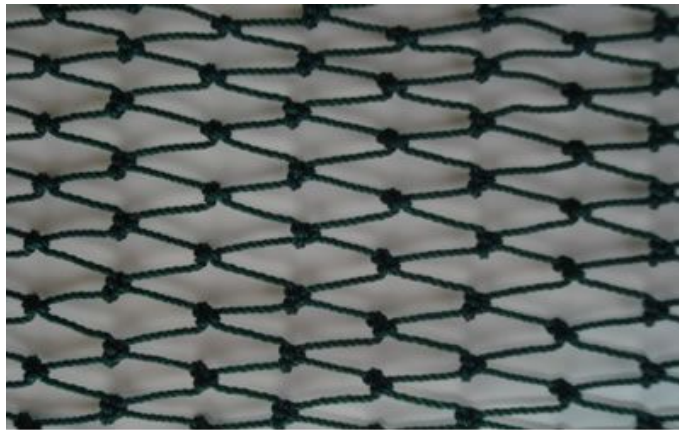
- **Stretched Mesh** – All diamond shaped netting, which includes all our Double Diamond nets, are supplied in a stretched configuration bundle. Most fishermen refer to their netting as a stretched mesh size. This means the netting is stretched apart and the distance is measured from opposing knots. This distance will measure TWICE the distance between adjacent knots. For example if a net measures 10mm from one knot to its most adjacent knot, when it is stretched it would be referred to as a 20mm stretched mesh size. It is measured from the inside of each knot.

## Length and Depth

Most netting is supplied in a stretched configuration, however some netting including sporting nets and bird netting is sold as an **IN USE** bundle. (the length and depth measurements will be quoted as if they were opened up and in use.) Netting is very versatile in terms of the area it covers. Most nets can be stretched in both directions, allowing for flexibility in terms of length and depth.

For example a bundle of nylon netting may measure 100metres in length. However when this net is opened up and stretched depthwise, some length of the netting will be lost.

Please contact us for assistance in determining your length and depth requirements, as our experienced staff can recommend you the most appropriately sized net.



This image shows a polyethylene net stretched lengthwise



This image shows the same net when opened up and IN USE. Note that as the netting is stretched depthwise, the length of the net is reduced relatively.

## Thickness of netting material

The thickness of the material can be determined in two ways depending on the type of net.

Polyethylene and multi-filament nylon netting is measured as a **PLY**. The larger the ply, the thicker and more heavy duty the netting will be. Double Diamond netting ranges from 4 ply right through to 280 ply.

Monofilament netting thickness is referred to as a **line number** and is based on the diameter of the mono line. Haverford stocks a range from Line 1.5 (0.30mm) through to Line 90.

Multi Mono Netting is constructed as a series of MONO lines wound together and as a result its thickness is described as follows. For example:

- 0.5 x 8 - This netting is constructed of 8 individual line 0.5 strands to form a single multi-mono net.
- 1.5 x 10 - 10 individual strands of line 1.5 mono – thus ensuring a thicker and heavier duty net.

## Net Colours and Net Dyes

Different styles of netting are available in different colours. Colour can be a determining factor for a net purchase regardless of its use, whether it be for fishing, or as a decorative net in a restaurant.

**Polyethylene:** The Haverford range of Double Diamond brand polyethylene nets come in a variety of colours. These include: black, white, blue, light and dark green, orange and brown. Haverford also stocks a range of polyethylene twine in a variety of colours, to help match the netting.

**Mono and Multi Mono Nets:** Colours stocked include smokey grey, clear, light green and red. Our Double Diamond mono and multi mono nets can however be ordered in a countless number of shades of these colours.

**MultiFilament Nylon:** This is the most versatile netting option in terms of colour selection. This netting has the flexibility of being dyed a particular colour using a net dye solution. Net Dyes are very affordable and go a long way in terms of their use. They are water-fast so they will not fade or be rinsed out in water. Dye colours include: red, black, yellow, green, grey, blue and brown. Multi-Filament Nylon is also supplied as Tarred. This is achieved by applying a Resin Tar to the net which hardens, strengthens and increases the lifespan of the net. Tarred nylon netting is Black.

**Braided Polyethylene:** these nets are currently available in an attractive blue/yellow sapphire, green/orange olivene, white and orange.

**Polyester Netting:** Currently available in bright pink.

**Please note:** Orders of certain colours not currently in stock can occasionally be subject to minimum quantity orders. Orders for unique colours can also be subject to delivery times from our Overseas suppliers.

## Netting Accessories

**Leads:** Haverford stocks a variety of net leads suitable for fishing nets. Leads kept in stock include SOLID and SPLIT, available in a large variety of sizes. Net leads are usually described according to their: grams / length / bore and design (split or solid).

**Net Mending:** Net needles used for net mending. Haverford stocks approximately 15 different sizes of net needles and a full range of Double Diamond twines in polyethylene and nylon materials.

**Net Floats:** Net floats for fishing nets are stocked in a number of materials. Common floats include hardened rubber (brown colour), P.V.C , and white styrene. Floats are also described according to various factors: length / diameter / bore and buoyancy.

**Twine:** Haverford has a complete range of twine comprising Nylon, Multi-mono, Polyethylene and more. These are used for net mending and net hanging. A range of colours and thicknesses are available.

## Made Up Nets – Customised Orders

Haverford offers a net making service whereby you can have your individual netting “hung”, complete with net leads, floats and rope. This ensures you are “ready to go” and it can be designed to your specific lengths, depths and individual needs. Delivery times on these nets can be up to two weeks so please plan ahead if you are intending to take the completed net abroad on a particular date.

Haverford also stock an entire range of ready made nets listed below as follows. Please view the product range of the website for full details:

- **Prawn drag nets** – Complete with Ropes, Floats and leads
- **Cast Nets** – including Leads, ropes, skirt pocket in a variety of spreads and drops.
- **Slung gill nets** – With Braided top rope, floats and braided lead-core rope on bottom.
- **Bait Nets** – Including leads, floats, ropes in a variety of sizes
- **Fyke / Eel Nets** – 1, 2 and 2 winged, Plankton Nets, Larval net and more. We also welcome CUSTOM MADE orders on Fyke panels.
- **Witches Hats / Yabbie Traps / Lobster and Crab Traps**



## **Delivery**

Most nets are kept in stock in our Sydney warehouse. Upon receipt of your order our nets are generally shipped within 2 days (most leave same-day), by the most reliable and most economical carriers. Haverford utilizes the services of Australia Post, NQX (toll), Couriers Please, Fastways and others to help ensure your parcel arrives on time and within budget. Stocks levels and our shipment dates are subject to a number of factors, however we aim to have most nets available for instant delivery. Local pickup in Carlton, Sydney is also available during business hours. Haverford also orders custom netting, and with a sufficient quantity, delivery can be expected within 3-4 months on a firm order.

## **Terminology**

### **UV Protection**

Netting can be highly susceptible to Ultra Violet Rays. Nets not treated for Ultra violet protection can break down and deteriorate over time. During production UV protection is added to the netting in various percentages however this process can add to the overall price of the netting. Almost all nets supplied at Haverford are UV treated, so depending on your application please double check with our staff if a particular net is suitable.

### **Selvedge**

The selvedge applied to a Double Diamond multi-mono or mono net, refers to a single line of mesh applied to the top and bottom of a net bundle. This selvedge is generally made of a gripper, easy to use nylon multi-filament material which assists in the ease of "net hanging". The mono and multi-mono nets can at times feel quite slippery, whilst the grippier selvedge ensures greater usability for the net maker. Multi Filament Nylon netting is mostly "double selvedged" top and bottom (has a double layer of netting, of the same material top and bottom to help reinforce the netting).

### **Mesh netting**

Simply multimono or mono netting.

### **Gill net**

Simply mono or multimono netting (often referred by this name by professional fishermen as a method of catching fish by their gills)

"Double Diamond" and "Holdfast" gear is guaranteed against faults in material and manufacture. Please examine goods on receipt reporting any faults as soon as possible. If faults are valid we will either exchange or refund/credit the amount concerned. However, we cannot be held responsible for gear which has been hung, used or treated in any way. Claims should be notified within 7 days of receipt of goods.