

## Single flap

Single flap specifications:

- Must be on the outside of the trawl.
- Must have a maximum mesh size of 50 mm.
- Must be a panel not less than 338 cm x 132 cm, with the 338 cm edge attached to the forward edge of the opening.
- Must not overlap the escape hole cut by more than 13 cm on either side.
- May be sewn down the outside edges no more than 15 cm past the posterior edge of the grid.
- Trailing edge of each panel must not extend more than 61 cm behind the posterior edge of the grid.

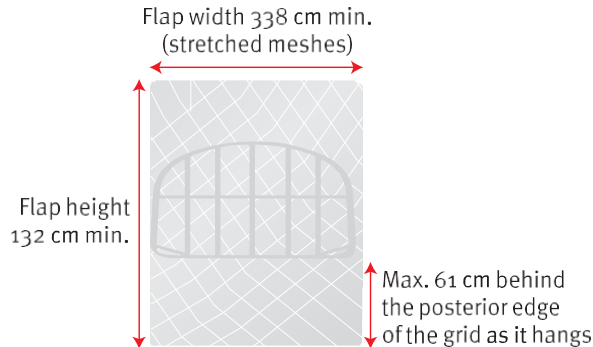


Figure 9a. Minimum flap measurements for a single flap



Figure 9b. Single flap

As a guide, the stretched width of the flaps can be measured by counting meshes. That is, flap size (cm)/ mesh size (cm) = no. of meshes.

$$338 \text{ cm} / 5 \text{ cm} = 67 \text{ meshes}$$

67 meshes is therefore the minimum number of meshes required in 50 mm mesh to achieve a 338 cm wide (stretched) flap.

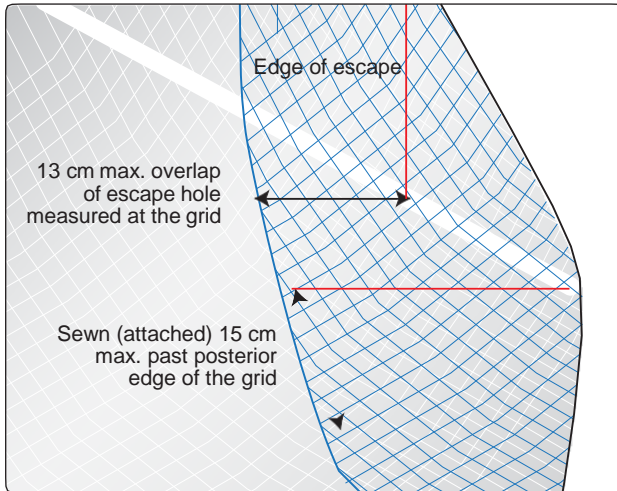


Figure 10a. Maximum flap attachments for a single flap

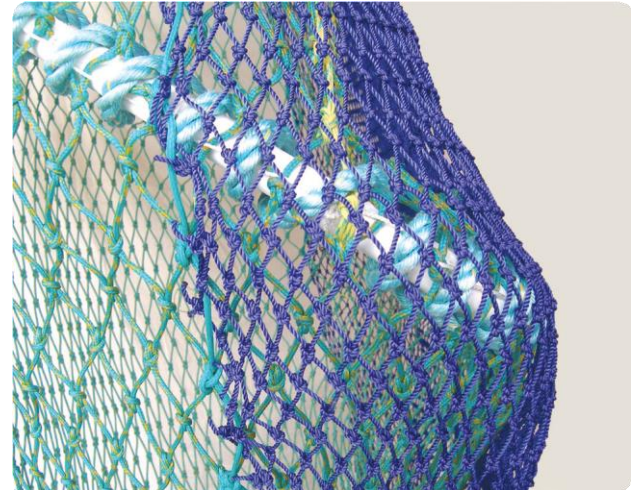


Figure 10b. Single flap

## Double flap nets

### Escape openings

There are three recognised opening options for a double flap net:

#### 1. Rectangle configuration



Figure 11a. Rectangular escape opening with double flaps

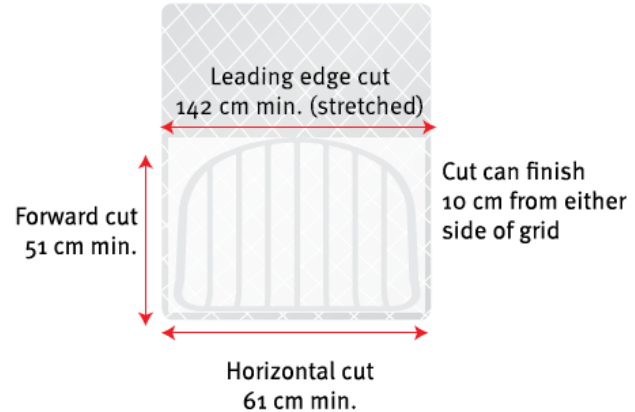


Figure 11b. Measurements for rectangular escape opening with double flaps

#### 2. Triangle configuration

- Triangle escape openings are identical for single and double flap nets (as shown in Figure 6a).

#### 3. Combination configuration

- Double flap combination escape openings are similar to single flap openings except they require a stretched measurement of only 142 cm at a position of 51 cm forward of the grid.

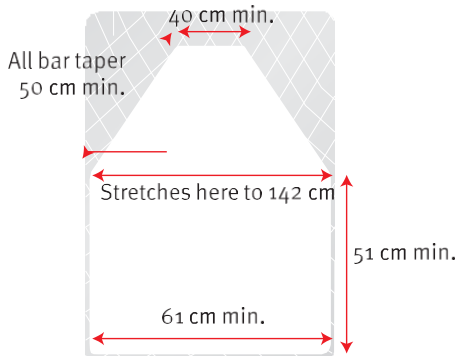


Figure 12. Minimum requirements for a double flap, combination escape hole opening

Flap overlap 38cm max. when mesh stretched transversely

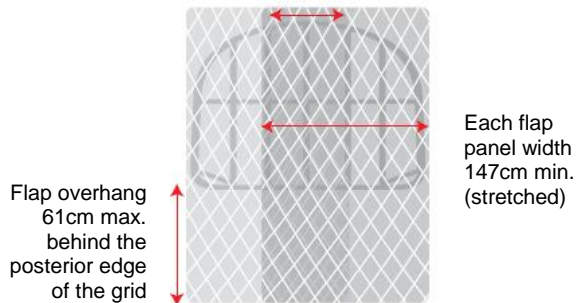


Figure 13a. Measurements for double flap configuration

## Double flap

Double flap specifications:

- Must be on the outside of the trawl.
- Must have a maximum mesh size of 50 mm.
- Must have two equal size rectangular panels, each a minimum 147 cm wide.
- Panels may overlap no more than 38 cm when stretched.
- Panels may be sewn together only along the leading edge of the cut.
- Panels may be sewn down the entire length of the outside edge of each panel.
- Trailing edge of each panel must not extend more than 61cm behind the posterior edge of the grid.



Figure 13b. Double flap configuration

## Helpful flaps hints

- Larger flap width with smaller mesh size helps to close the flap and retain target species—a result of having more knots for water to flow over. Ideally, flaps should be 1.5–2 times the minimum width. The 38 cm overlap can have as many meshes as required (as it is a physical distance of overlap and isn't restricted by the number of meshes).
- Knot orientation of the escape flaps is important, ensuring a 'snug' fit and reduced product loss. The knots should be oriented so the water pressure forces the escape flaps to sit tightly over the escape opening.
- 'Chunky' knots may result in better flap performance.
- Flaps may be tapered to increase the effective overlap at the grid.

## Floation

Floats **must** be attached to the top half of all grids with bottom escape openings.

- Floats may be attached inside or outside the net but not to the flap.
- Floats attached inside the net must be behind the grid (see Figure 16).
- The floation requirements must be satisfied by compliance with either the dimension requirements of paragraph (i) or the buoyancy requirements of paragraph (ii) below.

## Float dimension requirements

- a) For TEDs with a circumference less than or equal to 305 cm, at least:
  - (i) one ethylene vinyl acetate (EVA) or polyvinyl chloride (PVC) float 17.2 cm in diameter × 2.2 cm in length or two EVA or PVC floats 14.7 cm in diameter × 18 cm in length.
  - (ii) one hard plastic float 25 cm (10") in diameter or two hard plastic floats 20 cm (8") in diameter or three hard plastic floats 15 cm (6") in diameter.

- b) For TEDs with a circumference greater than 305 cm, at least:
- (i) two EVA or PVC floats 17.2 cm in diameter x 22.2 cm in length or four EVA or PVC floats 14.7 cm in diameter x 18 cm in length.
  - (ii) one hard plastic float 25 cm (10") in diameter or two hard plastic floats 20 cm (8") in diameter or three hard plastic floats 15 cm (6") in diameter.



Figure 14. Examples of PVC/EVA floats (left) and hard plastic floats (right)

## Buoyancy requirements

- a) Where the buoyancy requirement of the TED is satisfied without the need for additional floatation (i.e. plastic grids), the name of the manufacturer of the TED and density of the material used must be clearly and permanently marked on the TED. The marking must identify the density of the TED material to be less than or equal to seawater ( $<1.025 \text{ g/cm}^3$ ). Where the density of the material is less than that of seawater, no floats are required.
- b) Where floats are required to meet buoyancy requirements, they may be used in any combination of size and buoyancy such that the combined buoyancy of the floats equals or exceeds the weight of the TED.
  - (i) Floats must be marked in legible raised or recessed lettering that specifies the buoyancy of the float in water (expressed in grams or kilograms).
  - (ii) TEDs must be marked in legible raised or recessed lettering that specifies the weight of the TED in air (expressed in grams or kilograms).