

# CLIMAVORE

Polyculture Intertidal Farm  
Stage 01 - Feasibility Study

Material Test Options

## ECOLOGICAL SURVEY TEST MATERIAL : MESH TUBE

Material:



Species  
Seaweed  
Mussels

### Description

Cotton Strands Bisect Square Mesh, Sold for Mussel Cultivation, Available in Rolls or cut to length.

All ropes suspended from four posts in seabed, that collectively cover 4000mm x 5500mm.

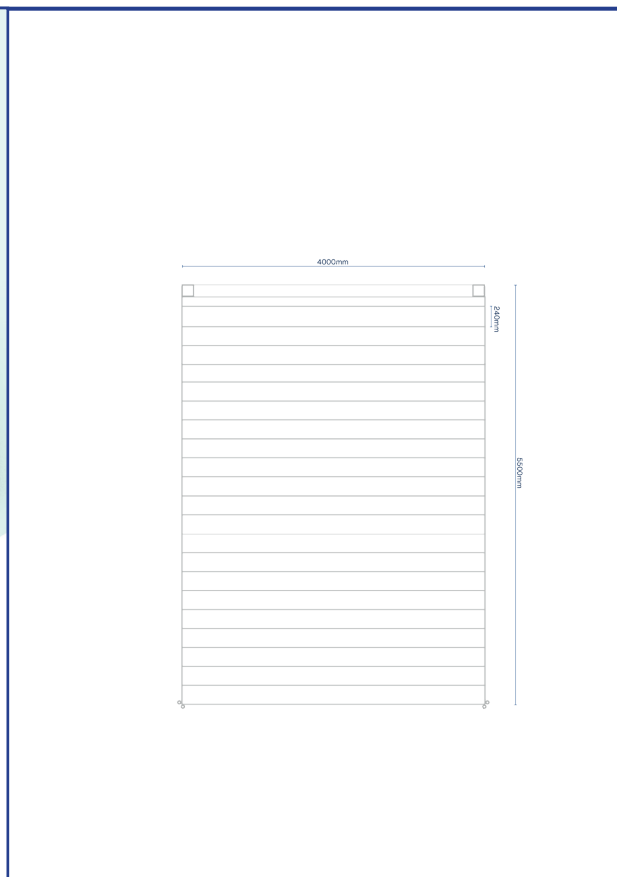
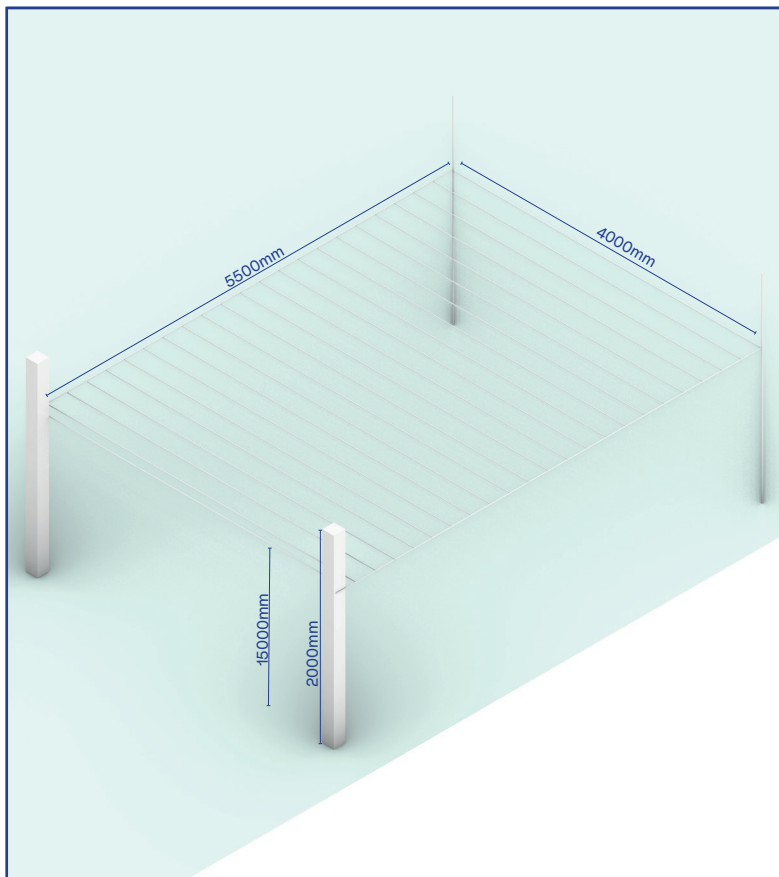
Precedent:



Specs  
40mm diameter cotton mesh, 1.140 liter volume, will hold seed size 9mm.

Testing  
Ecological Survey

Installation:



## ECOLOGICAL SURVEY TEST

### MATERIAL : BASKETTRY

#### Material:



#### Species

For dividing between growing areas / growing seaweed / gathering product

#### Description

Woven basketry used to be used as gates in the large fish traps in Skye, to trap the fish in. Woven basketry is also used in smaller fishtrap devices throughout the world.

#### Precident:



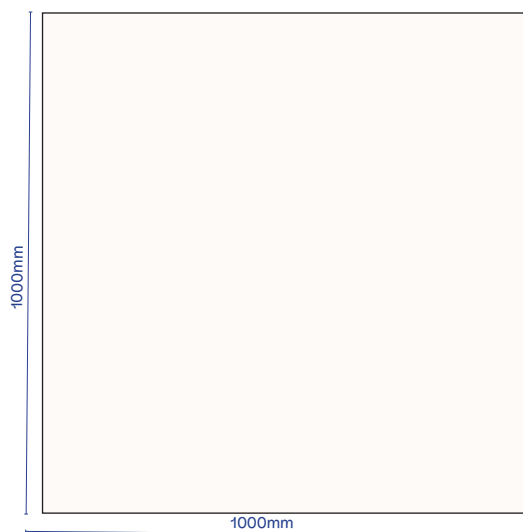
#### Specs

1000mm x 1000mm, woven panel, held up by metal bars.

#### Testing

Ecological Survey : Woven face

#### Installation:



## ECOLOGICAL SURVEY TEST

MATERIAL : ROPE : HEMP

Material:



Species  
Seaweed

Description  
Hemp Rope, manufactured at Chatham Master Ropemakers.

All ropes suspended from four posts in seabed, that collectively cover 4000mm x 5500mm.

Precedent:



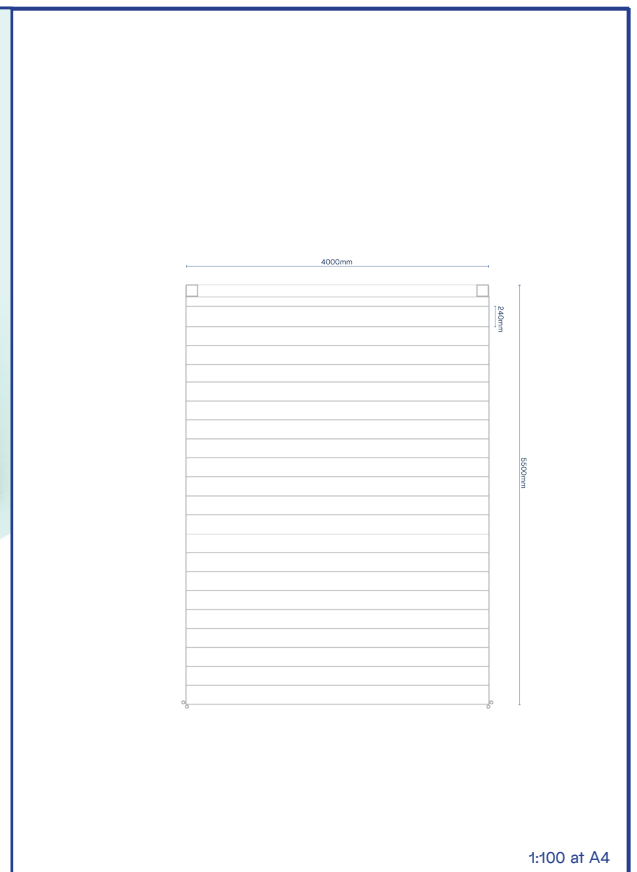
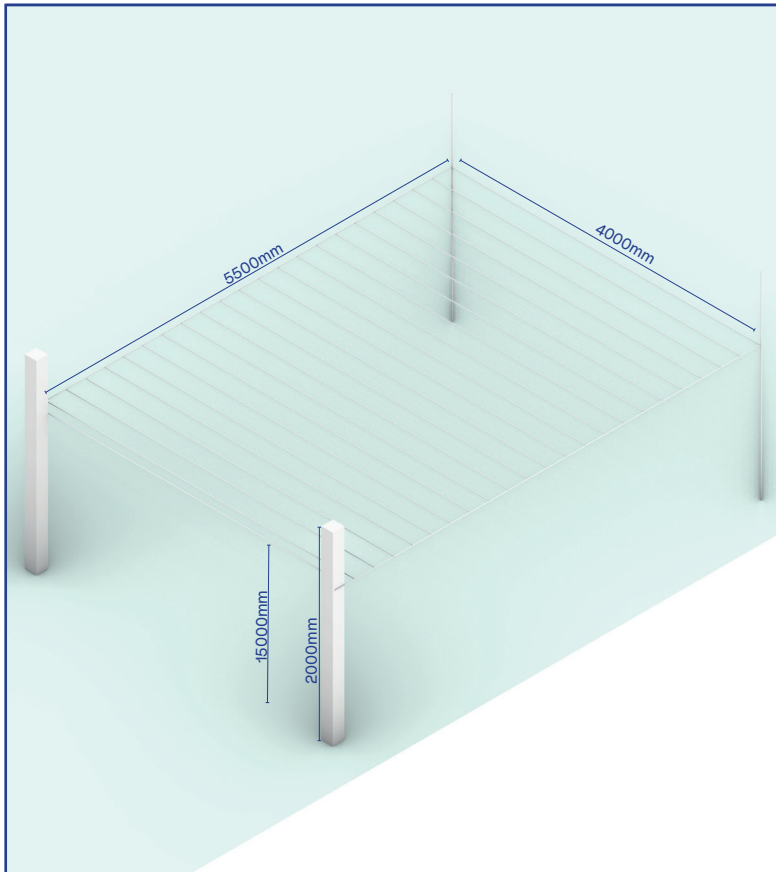
Specs  
Material: Hemp  
3 Strand Twist  
Length of Rope: 4000mm

Diameters of Rope : 12mm

Testing  
Ecological Survey

(Sample of rope, cut away from main installation)

Installation:



## ECOLOGICAL SURVEY TEST

MATERIAL : ROPE : MANILLA

Material:



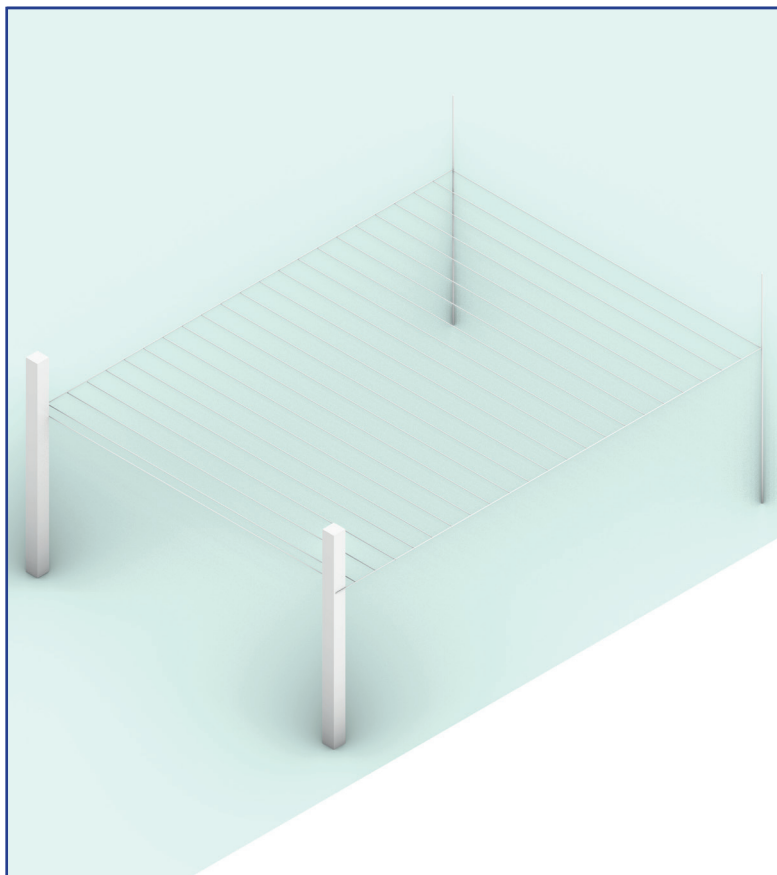
Species  
Seaweed  
Mussels

### Description

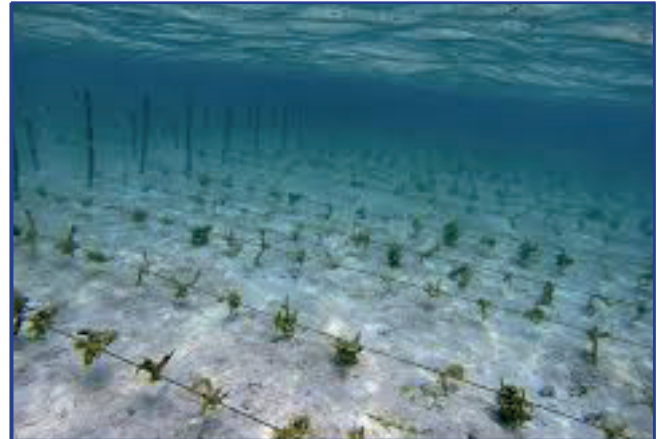
Manila hemp is a type of fiber obtained from the leaves of the abacá. Manila rope is very durable, flexible, and resistant to salt water damage, allowing its use in rope, hawsers, ships' lines, and fishing nets.

All ropes suspended from four posts in seabed, that collectively cover 4000mm x 5500mm.

Installation:



Precedent:



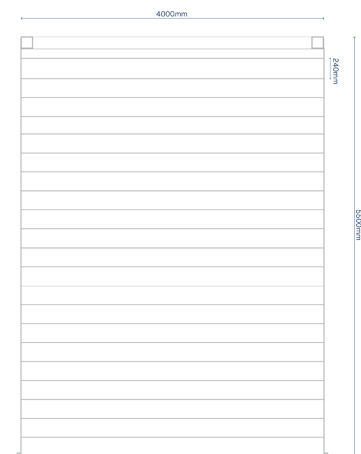
### Specs

Material: Manilla  
3 Strand Twist  
Length of Rope: 4000mm

Diameters of Rope : 12mm

Testing  
Ecological Survey

(Sample of rope, cut away from main installation)



## ECOLOGICAL SURVEY TEST

MATERIAL : ROPE : SISAL

Material:



Species

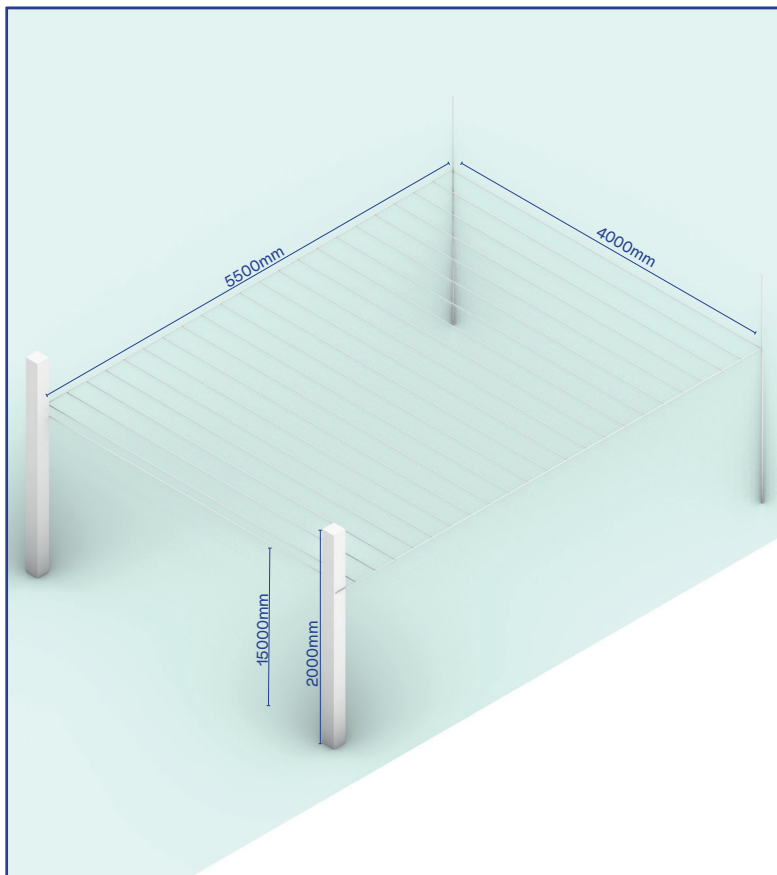
Seaweed

### Description

**Sisal, manufactured and hand-tied at Chatham Master Ropemakers.** Sisal Rope is a natural fibre rope and is made from the yarns of Agave Sisalana. Sisal rope is strong, especially resistant to sunlight, durable, and resistance to deterioration in saltwater.

All ropes suspended from four posts in seabed, that collectively cover 4000mm x 5500mm.

Installation:



Precedent:



Specs

Material: Sisal

3 Strand Twist

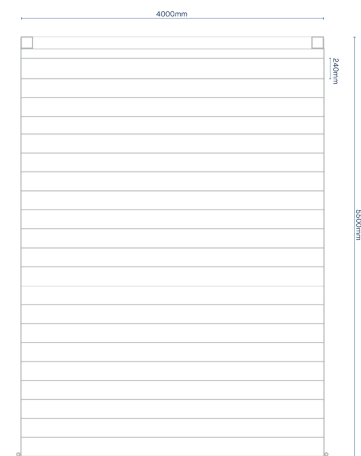
Length of Rope: 4000mm

Diameters of Rope : 12mm

Testing

Ecological Survey

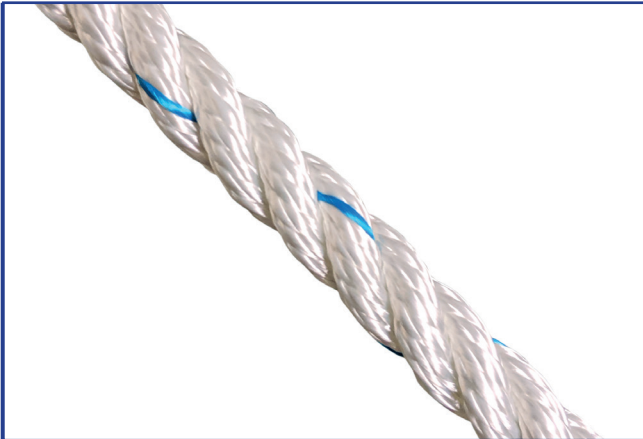
(Sample of rope, cut away from main installation)



## ECOLOGICAL SURVEY TEST

MATERIAL : ROPE : PLASTIC

Material:



Species  
Seaweed  
Mussels

Description  
Nylon Rope

All ropes suspended from four posts in seabed, that collectively cover 4000mm x 5500mm.

Precedent:



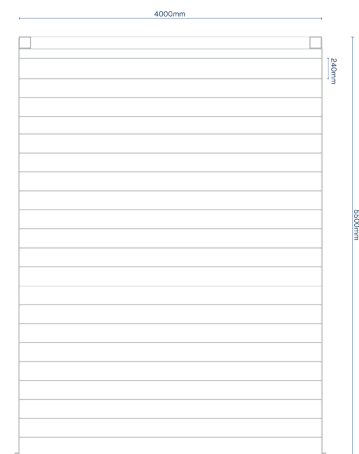
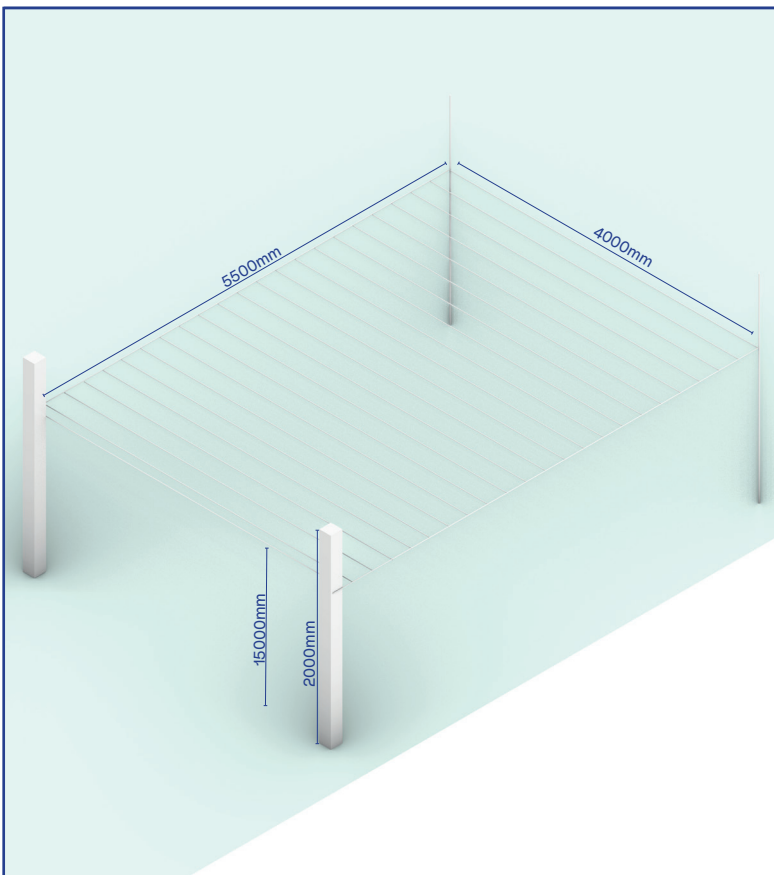
Specs  
Material: Sisal  
3 Strand Twist  
Length of Rope: 4000mm

Diameters of Rope : 12mm

Testing  
Ecological Survey

(Sample of rope, cut away from main installation)

Installation:



1:100 at A4

## ECOLOGICAL SURVEY TEST

MATERIAL : ROPE : JUTE

Material:



Species  
Seaweed  
Mussels

### Description

Jute Rope, manufactured and hand-tied at Chatham Master Ropemakers, from jute yarn sourced in the UK.

All ropes suspended from four posts in seabed, that collectively cover 4000mm x 5500mm.

Precedent:



### Specs

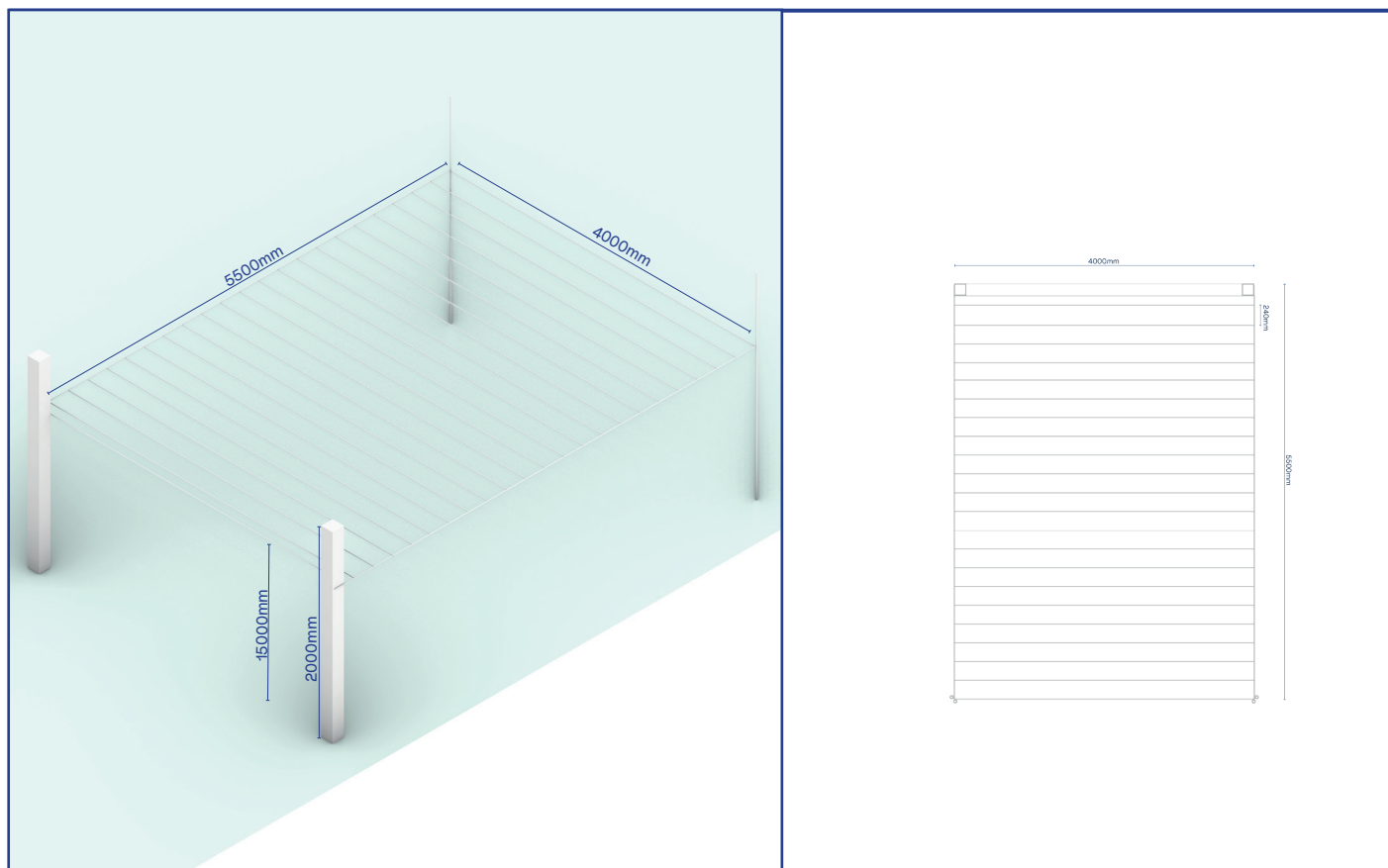
Material: Jute  
3 Strand Twist  
Length of Rope: 4000mm

Diameters of Rope : 12mm

Testing  
Ecological Survey

(Sample of rope, cut away from main installation)

Installation:



## ECOLOGICAL SURVEY TEST

### MATERIAL : SANDSTONE ROCK - DIFFERENT TEXTURES

Material:



Precedent:



Species

All

Description

Sandstone Rock is cut with five different finishes to test interaction with species. Sandstone rock is often beneficial to species as it is rich in calcium. Finishes will be cut in 60mm panels, on every side.

Local rock to Skye, sourced through Skye Stone Masons.

Specs

Dimensions : 300mm x 300mm x 500mm

5 different finishes: Rough, Smooth, 10mm grooves, 20mm grooves, 30mm grooves

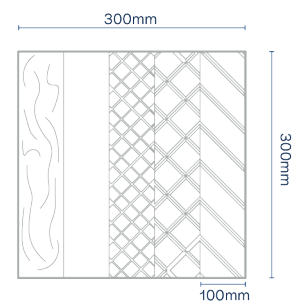
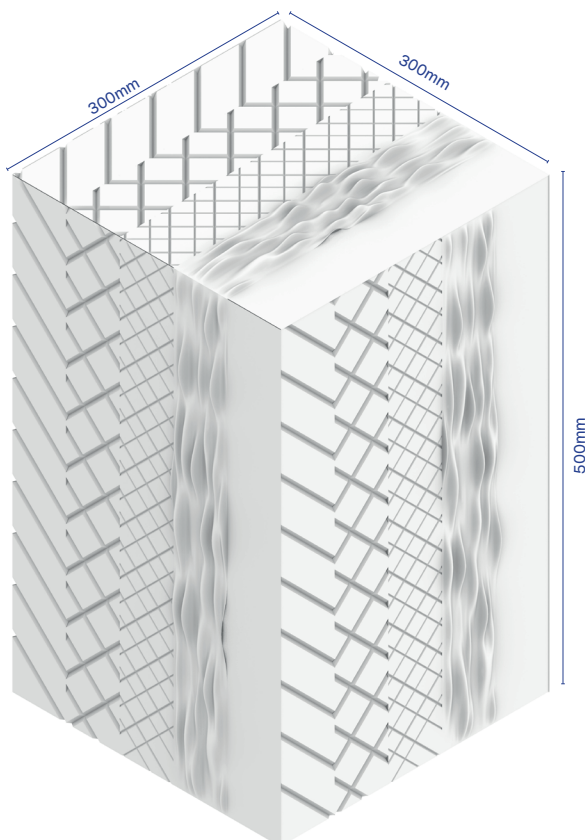
Positioned in 3 depths / locations

Testing

Ecological Survey

(Sample of rough edge, from each location)

Installation:



## ECOLOGICAL SURVEY TEST

### MATERIAL : LIMESTONE ROCK - DIFFERENT TEXTURES

Material:



Precedent:



Species

All

Specs

Dimensions : 300mm x 300mm x 500mm

Description

Limestone Rock is cut with five different finishes to test interaction with species. Limestone rock is often beneficial to species as it is rich in calcium. Finishes will be cut in 60mm panels, on every side.

5 different finishes: Rough, Smooth, 10mm grooves, 20mm grooves, 30mm grooves

Positioned in 3 depths / locations

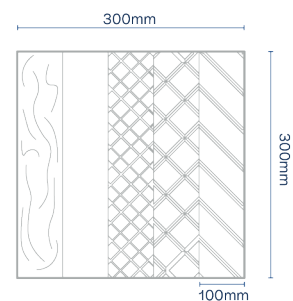
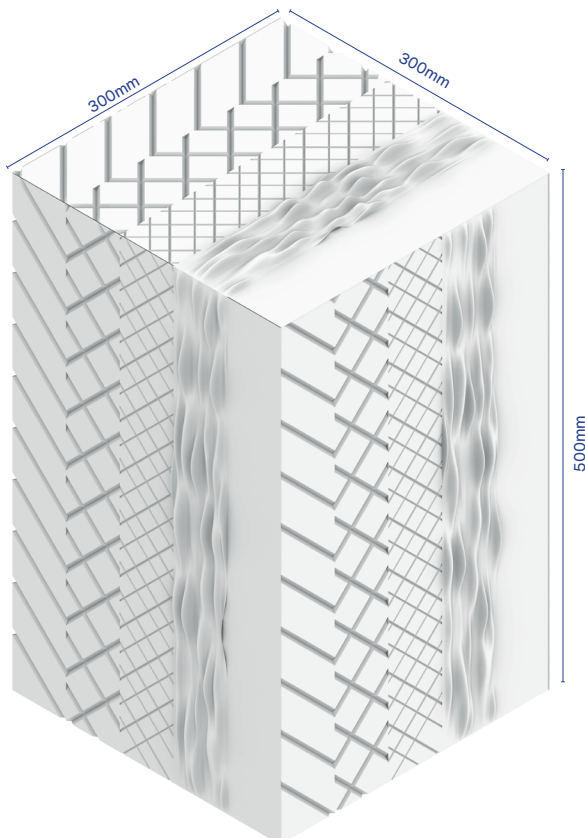
Testing

Ecological Survey

(Sample of rough edge, from each )

Local rock to Skye, sourced through Skye Stone Masons.

Installation:



## ECOLOGICAL SURVEY TEST

### MATERIAL : BASALT ROCK - DIFFERENT TEXTURES

Material:



Precedent:



Species

All

Specs

Dimensions : 300mm x 300mm x 500mm

Description

Basalt Rock is cut with five different finishes to test interaction with species. Basalt Rock is very hardwearing and will not erode in the tides. Finishes will be cut in 60mm panels, on every side.

5 different finishes: Rough, Smooth, 10mm grooves, 20mm grooves, 30mm grooves

Positioned in 3 depths / locations

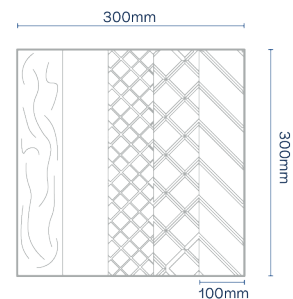
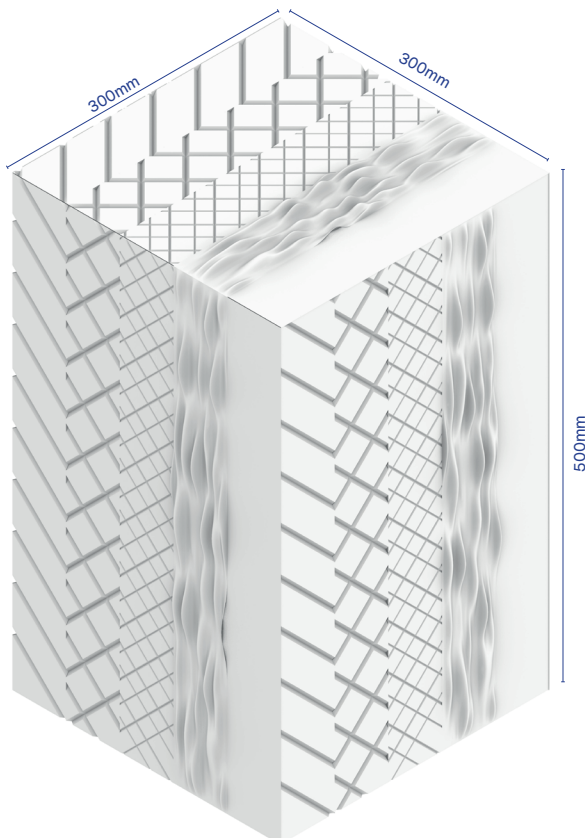
Testing

Ecological Survey

(Sample of rough edge, from each )

Local rock to Skye, sourced through Skye Stone Masons.

Installation:



## 03 - Structural Test

## STRUCTURAL TEST

### MATERIAL : WOODEN POST - OAK

#### Material:



Species  
Mussels

#### Description

For use as a Bouchot Poll to wrap seeded ropes around for mussel harvesting. Oak posts are typically used as oak can withstand marine conditions without treatment.

#### Precedent:



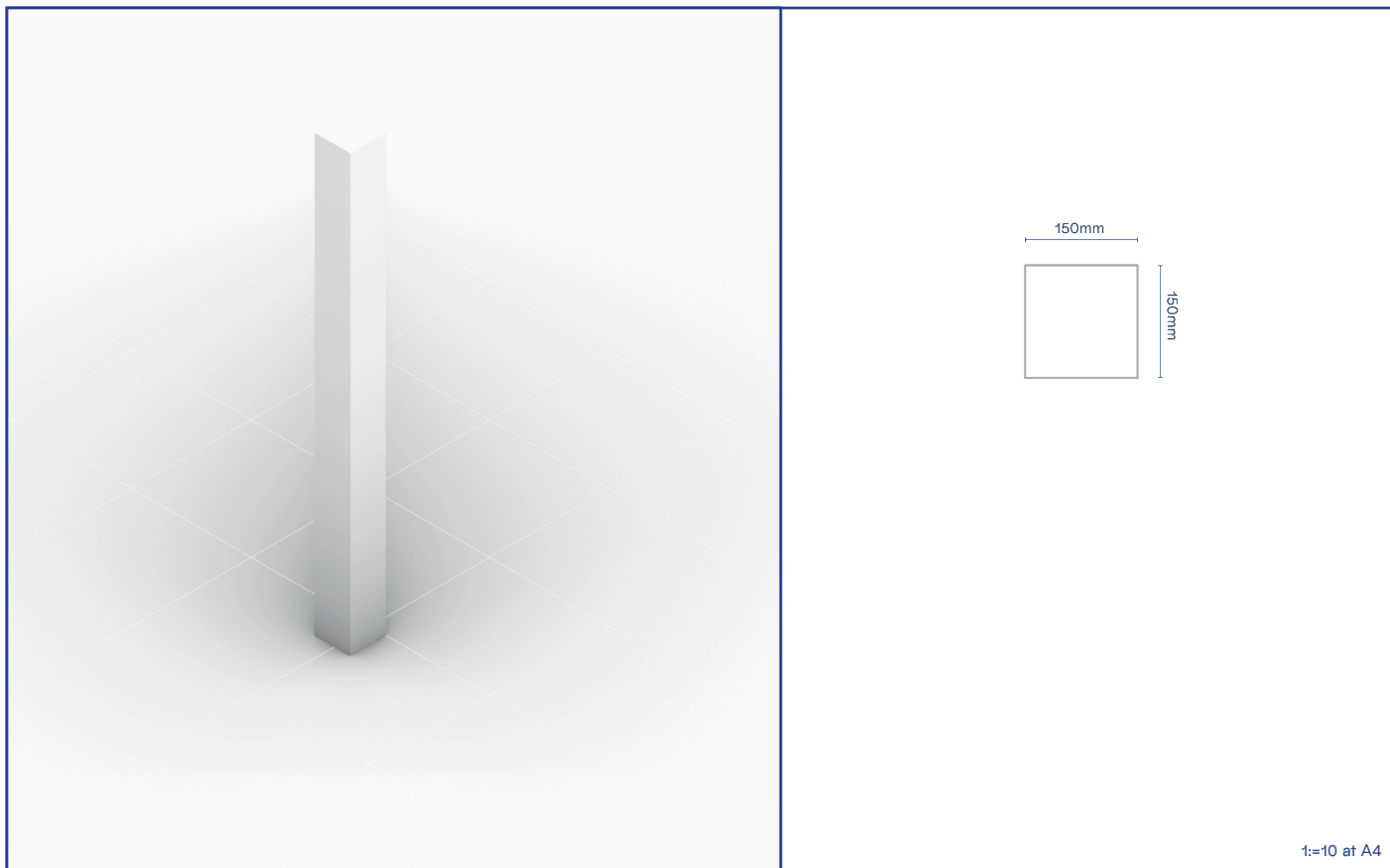
#### Specs

Posts are 150mm x 150mm x 2400mm

#### Testing

Structrural Test

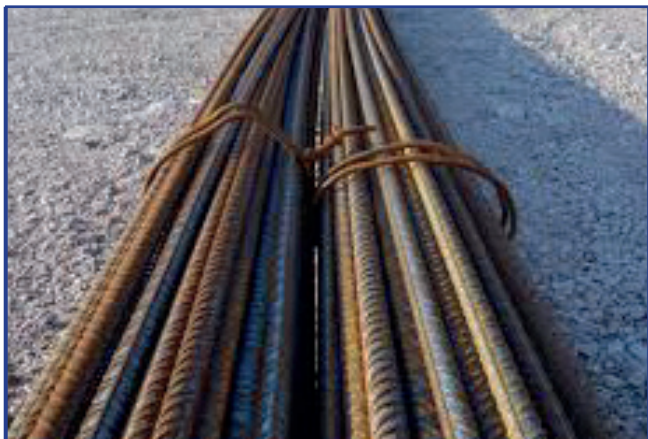
#### Installation:



## STRUCTURAL TEST

### MATERIAL : METAL POST - STEEL REINFORCEMENT BAR

Material:



Species

Seaweed (for supporting nets / rope)

Description

Used for suspending nets for seaweed growth. they would be driven within the ground. Reused from reclamation yard

Precedent:



Specs

1800mm in length

Diameters 10-40mm

Testing

Structural Test

Installation:

