

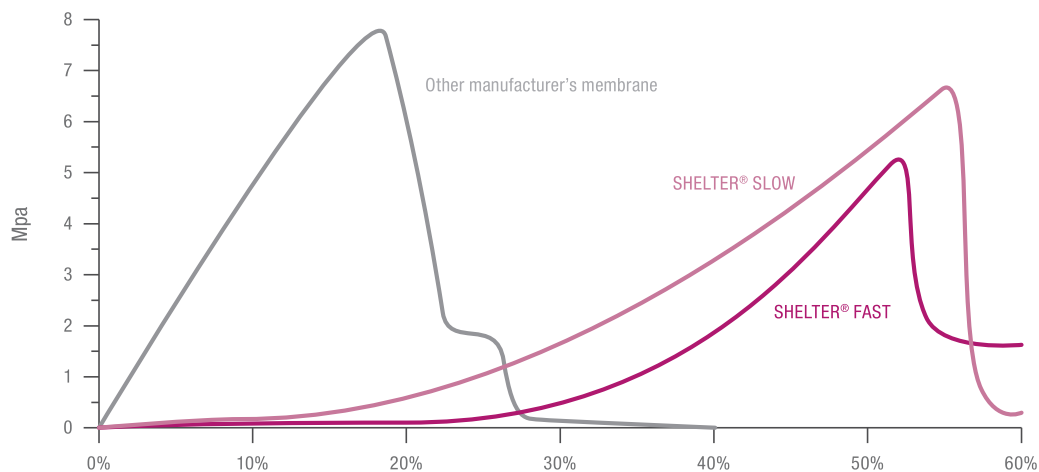
# UBGEN<sup>®</sup> SHELTER<sup>®</sup> BOVINE PERICARDIUM MEMBRANE

A complete line of bovine pericardium membranes with different resorption times and thicknesses, designed to promote healing processes in bone regeneration surgery.

## Mechanical properties

SHELTER® membranes have been tested through mechanical traction tests from which it has been possible to obtain stress/strain curves (FIG. 5) with a characteristic trend of collagen materials as proof of the fact that the UBGEN®, production processes, and Pericross in particular, keep the structure of the collagen fibres and other components, such as elastin, intact.

FIG. 5 - Stress/strain curve for pericardium membrane



*Zone 1: alignment of the fibres with very low elastic modulus. It indicates the need for a very low force to stretch the membrane.*

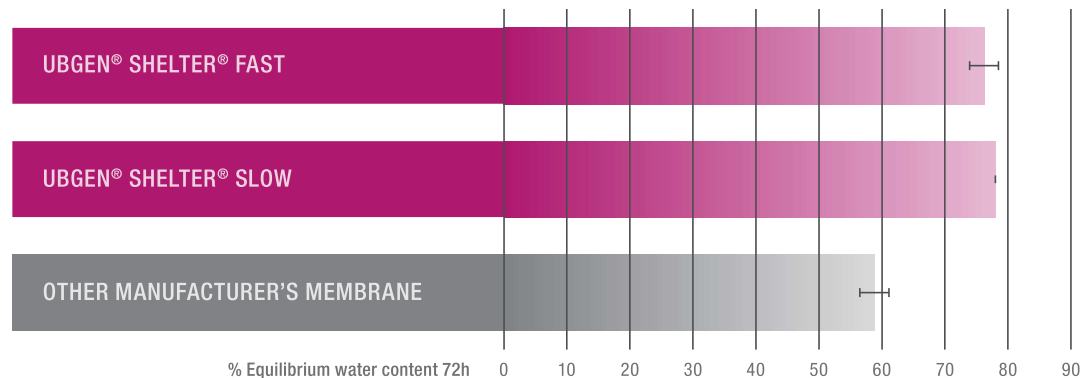
*Zone 2: the collagen fibrils are realigned with the direction of the effort and begin to oppose a certain resistance due to the inter and intra-molecular bonds.*

*Zone 3: inter-fibrillar bonds break and plastic deformation occurs until the sample breaks.*

## Properties of hydration

The SHELTER® production process allows the membrane to maintain the reticular structure of the collagen matrix conferring a certain porosity after dehydration (FIG. 7).

FIG. 7 - Dehydration tests conducted on SHELTER® FAST and SHELTER® SLOW compared to another manufacturer's membrane.



*In vitro studies have shown that the SHELTER® membrane is highly hydrophilic, as it is capable of rapidly absorbing the solution it comes into contact with, while maintaining its three-dimensional structure (without collapsing).*

*Following hydration, SHELTER® acquires high adhesive properties and adaptation to surfaces: this is extremely important for applications in which the membrane must be used and must conform even to very irregular surfaces.*

From this it can be seen that SHELTER® FAST and SHELTER® SLOW membranes are suitable for applications in the regeneration of alveolar bone tissue using the GBR and GTR techniques.

*Their ability to hydrate makes them easy to handle, able to adhere to irregular surfaces even in difficult to reach positions.*

# SHELTER® CLINICAL APPLICATIONS

Maintenance of socket and bone crest, maxillary sinus lift surgery, horizontal augmentation in two-walled defects, vertical augmentation in two-walled defects, dehiscences and fenestrations in peri-implant lesions, periodontal regeneration in infrabony defects and 2-3 wall furcation defects.

# SHELTER®

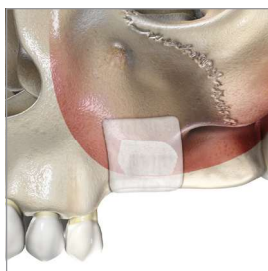
Clinical applications.

Maintenance of alveolus  
and bone crest.

Maxillary sinus lift surgery.

Horizontal augmentation in  
2-wall defects.

FAST  
membrane



SLOW  
membrane



PRODUCT	PACKAGING	CODE
SHELTER® F	Pericardium membrane 15x20x0.2 mm	
	Pericardium membrane 30x25x0.2 mm	
	Pericardium membrane 50x30x0.2 mm	
	Pericardium membrane 15x20x0.4 mm	
	Pericardium membrane 30x25x0.4 mm	
	Pericardium membrane 50x30x0.4 mm	
	Pericardium membrane 15x20x0.8 mm	
	Pericardium membrane 30x25x0.8 mm	
	Pericardium membrane 50x30x0.8 mm	
SHELTER® S	Pericardium membrane 15x20x0.2 mm	
	Pericardium membrane 30x25x0.2 mm	
	Pericardium membrane 50x30x0.2 mm	
	Pericardium membrane 15x20x0.4 mm	
	Pericardium membrane 30x25x0.4 mm	
	Pericardium membrane 50x30x0.4 mm	
	Pericardium membrane 15x20x0.8 mm	
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