

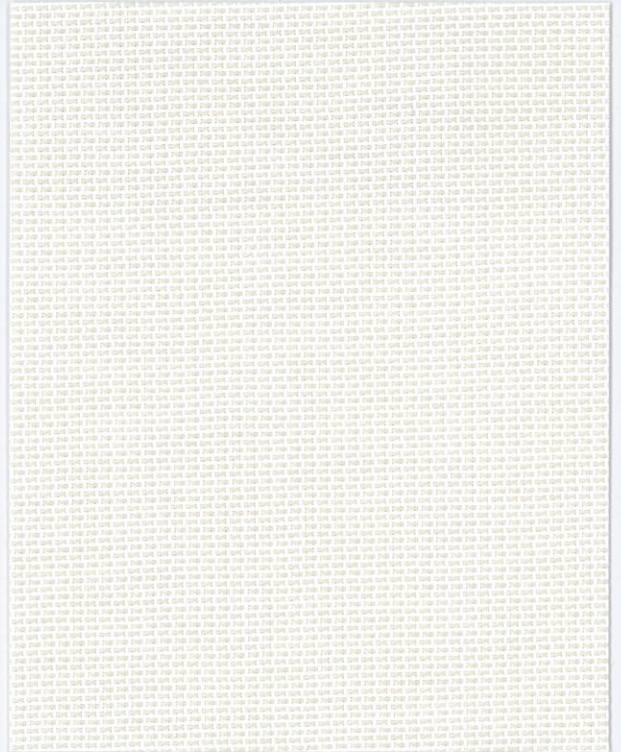
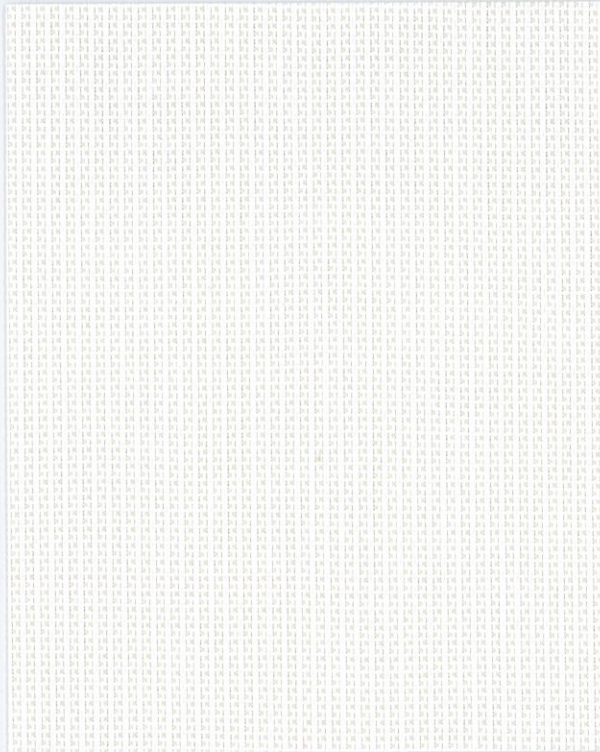


# **HIRAOKA ACOUSTIC MESH**

Lite



# HIRAOKA ACCO



## HM450

Each thread is individually resin-treated, allowing the color of single threads in the fabric to be changed.

## Custom Colors

All other colors or color combinations are available. HIRAOKA can custom match your colors on all of our PVC coated yarn mesh series. Our Custom Color program focuses on matching your desired specifications.



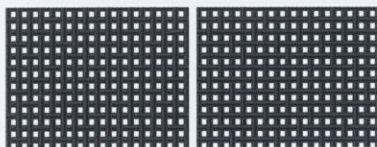
AT01



AT11



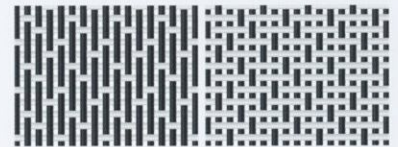
AT12



AT90



AT13



AT91



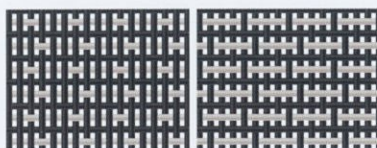
AT15



AT92



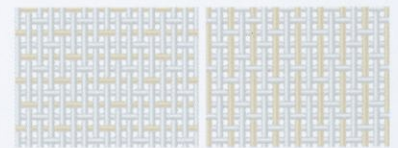
AT16



AT93



AT17

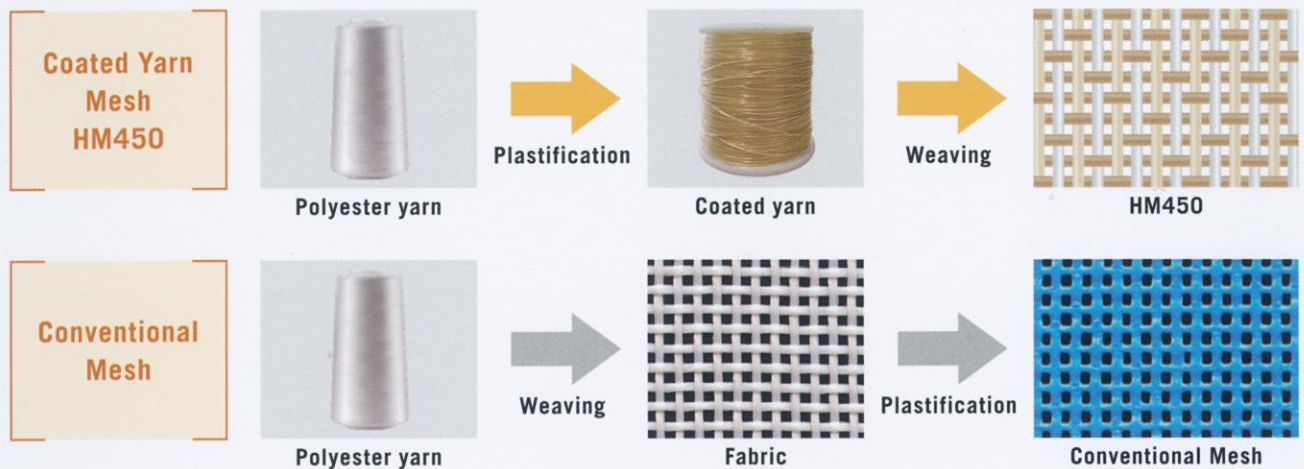


AT02



# JUSTIC MESH

## Process of Production



## Characteristic

### Ensuring the passage of air even with high-density weaves

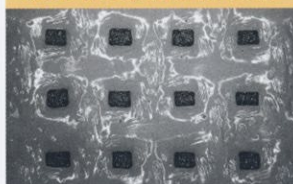
We can produce meshes with tiny openings even for tightly woven fabric. These tiny openings enable effective absorption of sound energy or air vibrations.

Acoustic mesh HM450



Tiny openings in the highly dense fabric absorb air vibrations (sound energy).

Our conventional mesh (SUPERSCREEN 134)

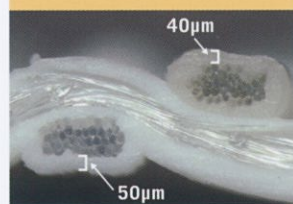


Cannot be processed if the weave density is too high.

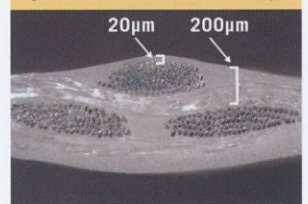
### Uniform resin film

Coated yarn has a more uniform membrane thickness than our conventional mesh. It has outstanding properties for indoor use because of the absence of a thin area in the resin film that triggers degradation by ultraviolet light, humidity and atmospheric chlorine.

Acoustic mesh HM450



Our conventional mesh (SUPERSCREEN 134)



## Coated Yarn Mesh

- Threads are individually resin-treated, allowing the color of single threads in the fabric to be changed.
- Different weaving structures and densities can be used, according to the design.
- The fabric can be printed on, allowing you to print whatever patterns or words you like onto it.





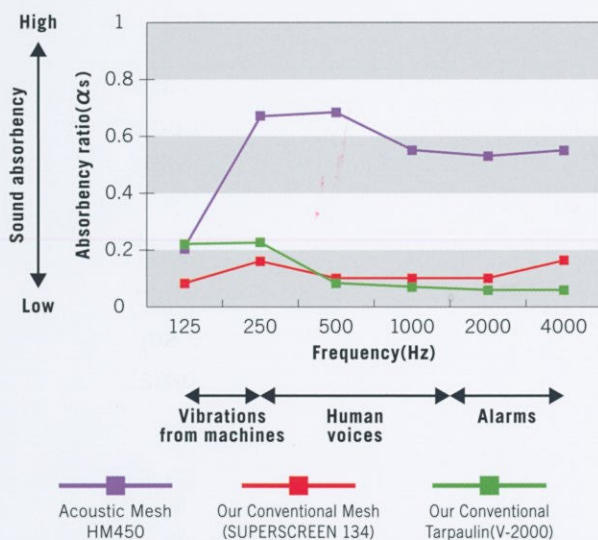
## Sound Absorbency

### Maintaining sound absorption and reducing weight

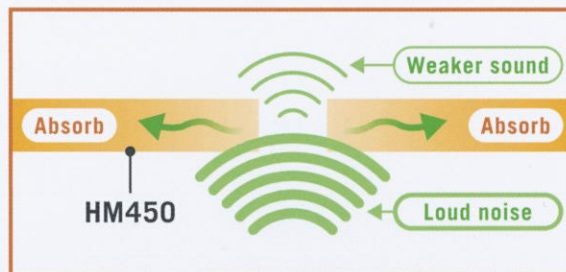
The sounds that we usually hear in rooms are classified into direct sounds that we hear directly from sound sources and sounds we hear that are reflected off walls and other objects.

HM450 absorbs echoes because it is installed so as to allow space to be maintained between the wall and ceiling. When sounds in a room contact HM450, the fine holes of HM450 absorb the energy of the sounds as air vibrations, and echoes in the room decrease.

HM450 is a mesh lighter than conventional meshes; however, it maintains a high level of sound absorption. Reducing its weight provides advantages of easier transportation and easier installation.



JIS A1409(ISO 354) : Method of Measurement of sound absorption coefficients in a reverberation room (Back air space: 300mm)



Not only is HM450 the only mesh that is as light as 450 grams per square meter, it is also capable of absorbing a wide range of sounds from low tones to high tones.

Various sounds that reflect in a room are absorbed, and conversational voices that directly enter ears can be clearly heard. It can be used in places where you want to reduce echoes, such as conference rooms and audio-visual rooms.

Product name	Acoustic Mesh HM450	Our conventional mesh (SUPERSCREEN 134)	Our conventional tarpaulin (V-2000)
N.R.C.	0.61	0.12	0.11

N.R.C.: Noise Reduction Coefficient  
The values are averaged from the absorbency ratios at 250, 500, 1000 and 2000 Hz from the 1/3 octave band center frequencies.



### ***Since 1902, we have been the Pioneer of Tent Sheets***

With our innovative production techniques and processing technology Hiraoka set new standards. We apply high quality polymer coatings to various textiles to produce specialized membranes for a wide range of applications. Years of experience allow us to meet the demands of our customers and society.

When Hiraoka originally commenced business in 1902, we scoured and dyed cotton and hemp products. Our mission today is to design and develop a range of products that reflect our customer's changing demands and the environments in which we live. Currently, we supply a range of creative membrane fabrics all over the world, including specialized materials for architectural structures.

#### **ACCREDITATION**

Our ISO 9001 compliant Quality Management System ensures absolute quality, consistency, and customer satisfaction. Our business system is accredited by UKAS, the United Kingdom Accreditation Service.



#### **CERTIFICATION**

We offer our clients professional services of an in-house team of registered, practicing engineers. This quality assurance ensures that our products are fully certified and meet all international standards.

#### **SUSTAINABILITY**

We proudly support numerous ecological initiatives. Our Research & Development Division continues to produce more current and greener products.



## Technical Properties

Technical deta	Standard	Unit	HM450
Width	ASTM-D751	cm	300
		inch	118.1
Length/Roll	ASTM-D751	m	30
		yard	33
Thickness	ASTM-D751	mm	0.6
		mil	24
Weight	ASTM-D751	g/m <sup>2</sup>	450
		oz/yd <sup>2</sup>	13.3
Tensile Strength	ASTM-D751	daN/5cm	180/170
		lbs/inch	206/194
Breaking Elongation	ASTM-D751	%	32/30
Tear Strength(Trapezoid)	ASTM-D751	daN	10/7
		lbs	22/16
Solar transmittance	ASTM E424-71	%	19.4(ATO2)
Flame retardant properties	EN 13501-1		B-s1, d0

The above mentioned data are average measurement value and are given as an indication. The purchasers may need to make an examination for your self for your particular purpose. This information is subject to revision without notice an new technological developments or modification become available.

## HIRAOKA ACOUSTIC MESH



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