



### BITUMINOUS UNDER TILE WATERPROOFING MEMBRANES

#### GENERAL DESCRIPTION

**ESHAROOF** undertile waterproofing membranes are specially designed for pitched roof waterproofing. They are produced from modified bitumen and reinforced with high mechanical strength polyester fabric.

**ESHAROOF** undertile waterproofing membranes are produced in light weight and heavy weight versions.

**ESHAROOF** light weight versions include:

- EshaRoof PP
- EshaRoof PQ
- Esharroof Felt

**ESHAROOF** heavy weight versions include:

- EshaRoof ELAS
- EshaRoof Reflect

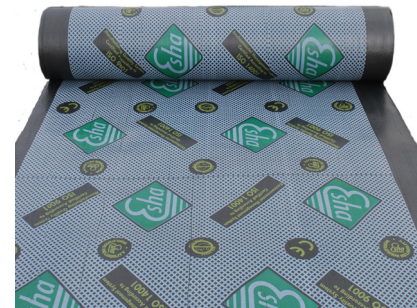


EshaRoof Reflect - Heavy weight, high reflectant undertile bituminous felt

#### SURFACE FINISH

**ESHAROOF** undertile waterproofing membranes possible top finishes are:

- Polyethylene (PE) film (**ESHAROOF PP**)
- Quartz sand (**ESHAROOF PQ & ESHAROOF ELAS**)
- Wooven polypropylene (**ESHAROOF FELT**)
- High Reflectant Aluminium Foil (**ESHAROOF REFLECT**)



EshaRoof PP&PQ - Light weight, high mechanical strength undertile bituminous felt

#### CHARACTERISTICS/ADVANTAGES

As a result of their high quality, **ESHAROOF** membranes offer the following advantages:

- Light weight durable not easily torn
- Not influenced by temperatures variations
- Easily applied with mechanical fixing
- Resistant to radiant heat transfer improving this way house energy consumption during summer months (**ESHAROOF REFLECT**)
- Excellent electromegnetic radiation barrier (**ESHAROOF REFLECT**)
- Very high elastic behaviour even at very low temperatures (**ESHAROOF ELAS**)



EshaRoof Felt - Light weight, high mechanical strength, semi-breathable undertile bituminous felt



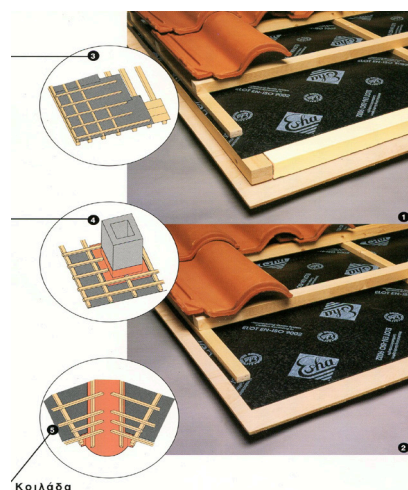
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#### TECHNICAL CHARACTERISTICS

CHARACTERISTICS	T	UNIT	NOMINAL VALUE			
			PP - PQ	FELT	ELAS	REFLECT
EshaRoof type			PP - PQ	FELT	ELAS	REFLECT
Weight	± 20%	kg/m <sup>2</sup>	0.85	0.95	2.0	1.8
Reinforcement material	---	---	Polyester re-inforced glass mat	Polyester re-inforced glass mat	Non woven polyester	Non woven polyester
Cold flexibility	± 5	°C	- 25	- 25	- 25	- 25
Tensile strength L/T	± 20	N/50mm	450 / 450	500 / 500	350 / 200	350 / 200
Elongation L/T	± 15	%	2 / 2	2 / 2	20 / 30	20 / 30
Tearing resistance	± 15	N	≥ 250	≥ 250	≥ 220	≥ 220
Roll dimensions	---	m	1 × 30	1 × 30	1 × 20	1 × 20

#### STORAGE

Membrane rolls should be stored in their original package, in vertical position, protected from direct sunlight, rain, snow and ice. In cold weather it is recommended that the rolls should be kept at a minimum temperature > 5°C for at least 10 hours before installation.



For a more detailed description of bituminous waterproofing membranes' application please contact the Esha Sales Department.

Tolerances in the nominal values are in accordance with respective standards. Producer reserves the right to modify the properties of his products.

The information contained in this leaflet is, to the best of our knowledge, true and reliable and is supported by the present state of our knowledge. According to the care taken and the method of application, upon which we have no influence, the values are subject to divergence. Therefore for best results, prior to use, an application test should be made by the user under his own processing conditions.

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