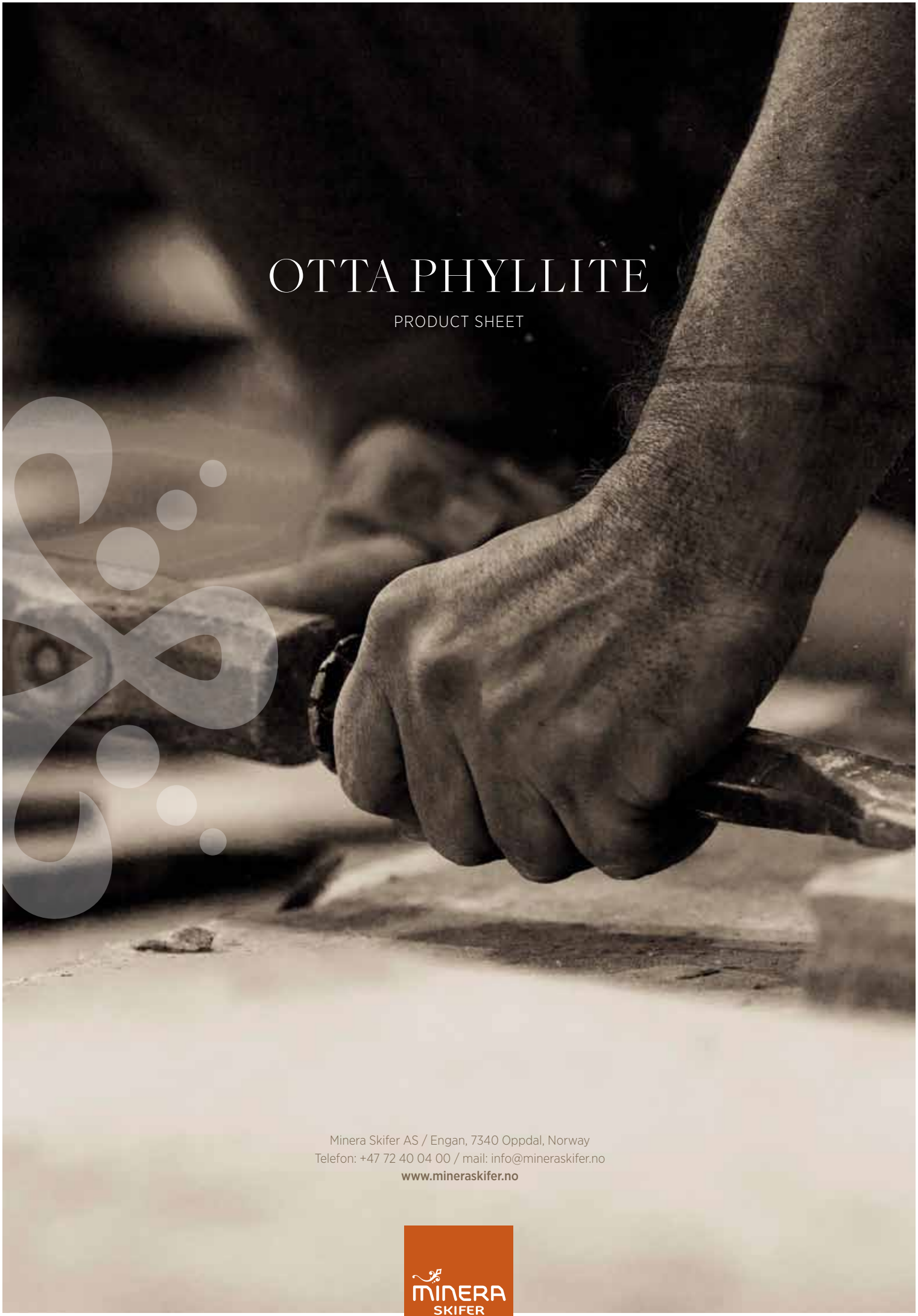

OTTA PHYLLITE

PRODUCT SHEET

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MINERA SKIFER

OTTA

OTTA PHYLLITE - STANDARD SELECTION

Edges: sawn, cut, natural. Surfaces: Natural, brushed, honed.

We deliver other sizes, thicknesses, edges and surfaces on request. We also deliver other products like facades, roofing tiles, window sills, chimney caps, slabs, machine stone etc.

Product	Thickness	Size
Tiles, natural	8-17, 17-25 mm, 10, 15, 18 mm	200, 300, 400 mm x rl, 300x600, 400x600, 300x300, 400x400 mm
Tiles, brushed	8 mm	200, 300, 400 mm x rl, 300x600, 400x600, 300x300, 400x400 mm
Tiles, honed	10, 15 mm	200, 300, 400 mm x rl, 300x600, 400x600, 300x300, 400x400 mm
Strips, natural	8-17 mm and 10 mm	30, 50, 80 mm x rl
Strips, brushed	10 mm	30, 50, 80 mm x rl
Mosaic, brushed 50x50 og 100x100 mm	8 mm	300x300 mm
Paving tiles	25-40, 40-60, 60-80 mm	200, 300, 400 mm x rl
Crazy paving, small (black or rust)	10-20 mm	5-10 pcs pr m^2
Crazy paving, medium (black or rust)	25-40, 40-60 mm	1-5 pcs pr m^2
Crazy paving, medium (floor cladding - black or rust)	8-17, 17-25 and 15 mm	1-5 pcs pr m^2
Treads, natural	20-25, 25-30, 30-40, 20, 25, 30 and 40 mm	300, 350 mm x rl
Treads, brushed or honed	20, 25, 30 and 40 mm	300, 350 mm x rl
Custom made slabs, natural	10-20, 20-25, 25-30, 30-40, 40-50 mm	Fixed size
Custom made slabs, natural, brushed or honed	15, 20, 25, 30, 40 mm	Fixed size
Wall bricks	20-70 mm	5-25 cm depth

TECHNICAL DATA

Feature/test	Standard	Value	Comment
Petrography	NS-EN 12670	Phyllite	
Density	NS-EN 1936	2,81 g/cm^3	
Water absorption	NS-EN 13755	0,2 weight-%	Frost resistant
Flexural strength	NS-EN 12372	30,7 Mpa	Mean value
Compressive strength	NS-EN 1926	230,4 Mpa	
Abrasion resistance	NS-EN 14157 (A)	25,0 mm	
Slip resistance brushed, dry	NS-EN 14231	61	
Slip resistance honed C600, dry	NS-EN 14231	55	
Slip resistance brushed, wet	NS-EN 14231	22	
Slip resistance honed C600, wet	NS-EN 14231	18	

MINERALOGY

Mineral	Value
Quartz	25 - 35%
Mica	40 - 45%
Chlorite	10 - 15%
Amfibol	0 - 5%
Garnet	1 - 3%
Carbonate	1 - 3%
Pyrite	1 - 7%

LOW ROAD MILES

Compared with most natural stone used in Scandinavia, our products generate only few road miles. Our quarries are at Oppdal near the Dovrefjell mountains, at Otta in the Gudbrandsdalen valley and in Offerdal close to Østersund in Sweden.

ENERGY CONSUMPTION

Energy consumption for extraction, transport from the quarry and for further processing is low. The material is split by hand and it is mostly cut to the correct sizes. No electrical power or oil is used for these operations. Just about every other type of natural stone is sawn from blocks and further processing consumes a lot of energy for splitting and grinding to produce a finished product.

RE-USE

As long as our stone is not exposed to any “abnormal” stresses (impacts and loading that is excessive for the design thickness) and is exposed to normal weather conditions, our stone is 100% reusable. The re-use percentage varies however depending on the installation method used. If the product is floor tiles cemented to a concrete base, then re-use is not really a realistic option. Wall cladding using bricks, dry stone walls, stone cladding on ventilated exterior walls and roof tiles on the other hand may be 100% recyclable.

When used for cladding interior and exterior walls, and in landscaping walls alongside roads and railways, as flood protection and such like, stone can be used to create structures that are both beautiful and benefit society. Unlike concrete structures, a natural stone wall can be rebuilt, and the material can be 100% reused in the future, if required.

In addition, the disposal of any stone material that is not reused does not entail any problems whatsoever. It can simply be returned to nature, where it came from.

EMISSIONS INTO THE ATMOSPHERE AND INTO WATER

Neither quarrying operations nor processing of the stone results in the release of any harmful substances into the air or ground or into water.

LIFETIME

As long as the stone is not exposed to any “abnormal” stresses and is exposed to normal weather conditions, it will have an estimated lifetime in excess of 100 years. The stone is already hundreds of millions of years old, and its properties will not change by being used indoors or outdoors for a few more centuries.

There are examples of stone structures that were built shortly after completion of the Dovre line in 1921 and which are still standing today precisely as they were built. There are no signs of weathering, or of any other change. These exterior surfaces have required only minor maintenance. Of course there is no need for painting or washing, removing algae or any other kind of maintenance.

The station hotel in Oppdal is a good example, as are the engine sheds. The walls of these buildings have probably not been touched since they were built. What can be seen is damage to concrete casings and such like. The stone is undamaged. Inexpert installation may shorten the lifetime of the product.