1. PRODUCT DESCRIPTION, AREAS OF USE

MøreRoyal® roof boards are produced from planed pine. Smooth on one side and with grooves on the underside. Two different widths make four different roof designs possible, by varying the width of the boards above and below. (same board reversed). 21x148 are supplied in mixed lengths (end groove) and fixed lengths at 30 cm intervals, from 2.7 m - 6.0 m. 21x98 are supplied only in mixed lengths.

In addition to being pressure-impregnated with a copper-based (CX-8) water-soluble salt impregnation, MøreRoyal® roof boards are baked in a process oil under vacuum. This process gives an almost water-resistant surface and reduces moisture movement in the wood. This increases dimensional stability, reduces moisture movement and crack formation. A colour pigment can be added to the oil.

Pigment colours: RB.10 brown, RY.20 ochre, RG.25 grey, RS.25 Alpine black, and RO.0 natural. These are transparent colours. Cosmetic variations/differences in colour can occur, as the heartwood, sapwood and knots can absorb pigment differently. Because we use pine, resin can often ooze out, especially around knots. Resin deposits will be more noticeable on dark colours.

Pressure-impregnated and royal-treated timber products rest on laths during production, which can leave striped marks.

Pressure-impregnation is classified according to the requirements of the impregnation standard NS-EN 351 and supplied in class AB. Impregnation helps ensure that the timber has a longer service life. Other adaptation of the boards than cutting the ends can reduce service life. We recommend MøreRoyal® wood oil for use with MøreRoyal® roof boards. MøreRoyal® wood oil is the same oil we use when manufacturing MøreRoyal® timber products. With regard to the cosmetic appearance (colour match) and viscosity (penetration), MøreRoyal® oils are the only ones recommended for treating cut boards, and subsequent maintenance.

Talgø MøreTre AS is a member of Norsk Impregneringskontroll (NIK) and uses the Nordic impregnation classifications defined in the Nordisk Trebeskyttelsesråd (NTR) document no. 1. The Norwegian impregnation classes are based on NS-EN 351, and correspond to impregnation class P8. The criteria for penetration of the impregnation agent are determined by the NTR. Inspections are performed by NIK twice annually. Cladding that is not inspected by NIK is of unknown quality and is not classified.

Areas of use:
MøreRoyal® roof boards are used for roofs on houses, huts, garages and other buildings where a timber roof is the natural choice.
**Colour, surface:**
MøreRoyal® roof boards are planed pine, with an unplaned front. MøreRoyal® RO.0 with no pigment gives a golden oil colour with a slight shade of green copper from the salt impregnation. MøreRoyal® cladding RO.0 will become a weathered grey after a period of time, which depends on the level of UV radiation, wind and weather. The pigmented colours give a transparent surface that allows the structure of the wood, knots etc. to be visible. Cosmetic variations/differences in colour can occur, as the heartwood, sapwood and knots can absorb pigment and oil differently. Resin deposits can occur, especially around knots. These can cause gold-coloured patches of resin, and can cause the surface treatment to peel. Pressure-impregnated and royal-treated timber products rest on laths during production, which can leave striped marks. Cosmetic appearance is subjective, and also depends on various climatic conditions. The various colours will also have different periods of cosmetic duration. No guarantees are therefore given concerning cosmetic appearance unless a manufacturing fault can be proven. Excess surface oil can accumulate in runnels underneath a board.
Surface treatment:
MøreRoyal® roof boards are supplied fully treated. See above.

Accessory products:
Wooden gutters and brackets.

Advantages of MøreRoyal® cladding:
Copper-based pressure-impregnation. Wood protection to extend durability. Dry effect.
Oiled on all surfaces.
Oil reduces moisture absorption, gives stability and reduces cracks. Oil prevents the loss of the substances used for impregnation.
Available in 5 different colours. Low maintenance costs.
Lower total cost over product lifetime.

2. MEASUREMENTS/TECHNICAL DATA

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>98</td>
<td>148</td>
</tr>
</tbody>
</table>

3. LAYING/EXECUTION

NS 3420 code for execution:
S56.1 Cladding, roofing using S56.11 timber. Board roofing.

NS 3451 code for building part:
265 Roofing.

Reference to NBI building detail:
544.106 Roofing using pressure-impregnated boards.
744.105 Repair and relaying of overlapping roofing.

Other references:
To avoid unsightly stains, we recommend fastenings are made of A2 stainless steel or acid-resistant A4.

Transport and storage:
The wood cells are filled by fluid during impregnation (the fluid used mostly consists of water). In the oil oven, the timber is dried out again. This means that the cladding is dry and can be laid immediately. If the boards are stored in stacks for an extended period of time, mould and fungus can form on the surface. Mould can be brushed or washed off. We recommend long-term storage under cover to protect the wood surface from the UV rays of the sun and wind/weather, which can unnecessarily cause colour variation. We do not recommend storing MøreRoyal® cladding under a tarpaulin.

4. HSE REFERENCES
MøreRoyal® timber products must not be used in direct contact with food and/or drinking water.
If cutting or machining pressure-impregnated (MøreRoyal®) timber in a manner that will cause a lot of dust, a type P2 dust mask must be worn.

See also 'HSE FACTS' with reference to the instructions in the Norwegian Labour Inspection Authority’s publications. Special measures for firefighting, temperature and/or humidity changes etc. See HSE FACTS.
5. PRODUCT DOCUMENTATION AND PUBLIC REQUIREMENTS

Product approval issued by an accredited body.

Talgø MøreTre AS is a member of the voluntary quality control body Norsk Impregneringskontroll (NIK). All members of NIK produce products according to the Norwegian impregnation classes M, A, AB and B, and can use the Nemko Certification AS quality stamp, NS. NIK’s quality control is based on NS-EN 351, and roof boards have penetration class P8. Absorption of the impregnation substance is approved by the Nordisk Trebeskyttelsesråd (NTR) for the class. Talgø MøreTre AS produces roof boards in class AB, for use above ground. Only those manufacturers who are members of NIK (or equivalent quality control programmes) can supply quality-controlled products. Such products are individually marked, and have a packing note with the NS stamp, classification and manufacturer’s number. Talgø MøreTre AS has no. 42.

CE-marking/European Technical Approval (ETA):
There is a harmonised standard for this product. The declaration of compliance is available on the manufacturer’s website.

Other national/international quality control programmes, certificates, industry standards etc.:
Impregnation classes are based on the NS-EN 351 impregnation standard. The classes are designated by the letters M, A, AB and B.

Our roof boards are manufactured to class AB. To be able to manufacture according to the above class, the manufacturer has to be a member of Norsk Impregneringskontroll (NIK). Products inspected by NIK have to be individually marked with the Nemco Certification System AS stamp. Talgø MøreTre AS has stamp no.: NS AB 42.

Timber packaging must also always contain a pack or bundle label defining class and usage, set no., impregnation substance name, absorption amount per m3, that it has been inspected etc.

6. WASTE HANDLING ACCORDING TO NS 9431/PACKAGING

Code for waste handling.
1142 / 0400 / 0600 / - - -

7. COMPANY RESPONSIBLE

Manufacturer: Talgø MøreTre
AS Organisation no.: 978 706 843 mva
Address: Industriveien 7,
post number and city/town:
N-6652 Surnadal

Email: kundeservice.moreroyal@talgo.no

Website address: www.talgo.no