

# BUILDING PRODUCT DECLARATION

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Marmoroc Baltic/Nordic façade system

## **PRODUCTS**

Façade stone of crushed marble and white cement  
Supporting profiles of rolled, pressed or edge-bent steel

## **MANUFACTURER/SUPPLIER**

Marmoroc AB  
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Box 274  
SE-731 26 Köping

## **DECLARATION OF CONTENTS**

**Façade stone of natural material**

**Steel profiles, hot dip galvanized, in compliance with EN 10142**

The product consists on average of 20-30 % recycled material

**Metallisation layer of zinc, 275 g/double side and chromating layer, 10-20 mg/m<sup>2</sup> and side.**

Residues from metalworking oil and vegetable lubricating emulsion

## **APPLICATIONS**

Cladding of façades or foundation walls in supporting or non-supporting structures.  
For exterior and interior façade cladding, where high heat resistance and fire protection are required.  
Marmoroc façade system has European Type Approval **ETA 16/0847**.

## **Reference**

This building product declaration has been prepared in compliance with the Eco Council of the Building Sector's instructions (*Krettsloppsrådet*) for building product declarations (1997 in September)

## 1. Constituent material

1.1		1.1.A	1.1.B/C	1.1.D	1.1.E	1.1.F	1.4
Raw materials	Weight percentage weight %	Type of energy at production and handling	Renewable	At ext. and transport. Emissions to water	At ext. and transport. Emissions to water	Impacts on land	Origin
Limestone/Marble	73.00 %	Electrical and fossil fuel	No	None	None	Open pit mining Open pit mining	Sweden Spain
Cement	18.00 %					None	Sweden
Water	8%					None	Germany
Pigment, iron oxide based	0.50 %					None	Germany
Lime reducing agent	0.01 %					None	Germany
Soap	0.01 %					None	Germany
Hot-dip galvanized steel sheet	around 5	Electrical and fossil fuels	No	None	At transport	Ore mining	EU

## 2. Production

### Production process

2.1.A	2.1.D	2.1.E	2.1.F
Type of energy	Emissions to water	Emissions to air	Impacts on land
Electrical	None	None	None

## 3. Distribution Applies to finished building products

3.1	3.2	3.3	3.4
Production location/country	Mode of transport	Modes of distribution	Packaging
Façade stone in Sweden  Assembly profiles in Sweden	Lorry	95 % directly to workplace	Return pallet of wood, corrugated board and plastic film  Steel or plastic strips

## 4. Building phase

### Building production and adaptation

4.1.A	4.1.B/C	4.1.D	4.1.E	4.1.F
Type of energy	Type of material (1)	Emissions to water (2)	Emissions to air (2)	Impacts on land
Electrical current to screw and cutting machines	None	None	None	Residual products are recycled

(2) Refers to impacts on water and air during construction

(1) Need of consumables for construction

## 5. Usage phase

### Operation and maintenance

5.1.A	5.1.B/C, 5.2.B/C	5.1.D, 5.2.D	5.1.E, 5.2.E	5.3
Type of energy	Type of material (3)	Emissions to water (4)	Emissions to air (4)	Life span (Resistance)
None	None	None	None	> 50 years

(3) Goods necessary to maintain the functionality and properties when the building is in use

(4) Refers to emissions or impacts on emissions when the building is in use

## 6. Demolition

### Dismantling

6.1.A/B/C	6.1.D	6.1.E	6.1.F
Type of energy	Emissions to water	Emissions to air	Impact on land
Electrical current to screw machines, none Special equipment required, easy to disassemble in manageable parts. Stones broken off, requires no electric current	None                      None	None	None

### 7. Residual products

#### Reuse, recycling

7.1	7.2	7.2.A	7.2.D	7.2.E	7.3
Reuse	Recycling	Energy requirements at recycling	Emissions to water	Emissions to air	Energy recovery
Possible	Yes	Electrical Fossil fuels	None	From transport and fossil fuels	None

## 8. Waste products

### Landfill

8.1.D	8.1.E	8.1.F
Emissions to water	Emissions to air	Impacts on land
None	None	None

### 9. Internal environment

9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8
Content of allergy causing substances	Construction process	Own emissions	Ambient material	Surface for 9.4	Operation and maintenance	Sound level	Electrical and magnetic fields
None	None	None			None	None	None

Marmoroc AB

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