

# ScandiSales Grafisk



**ScandiROCK – Paper made from stone**

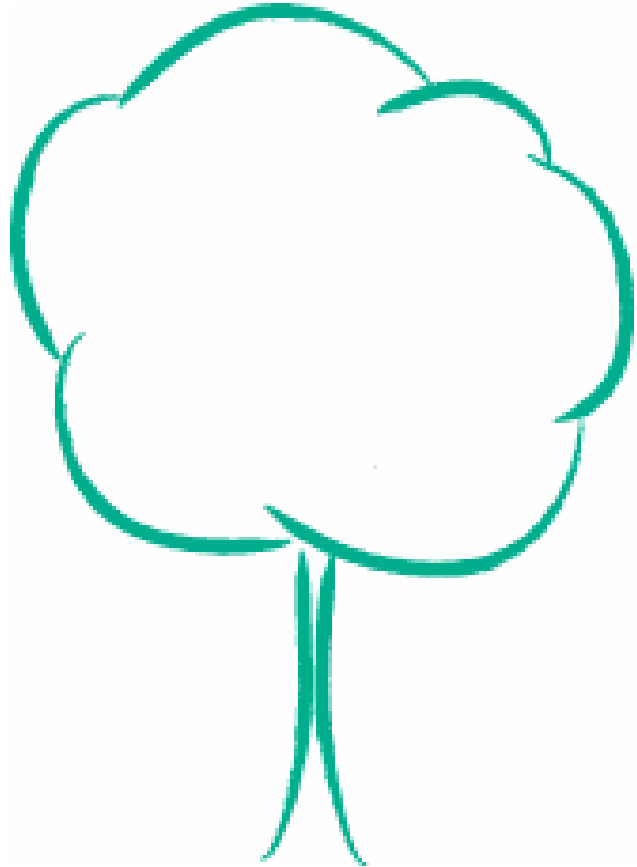
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# ScandiROCK – Paper made from stone

- Contains up till 85% Calcium carbonate ( $\text{CaCO}_3$ ) and 15% HDPE (High Density Polyethylene).
- Has the technical qualities of both paper and plastic. (good printing qualities, weatherproof, strong, exclusive feeling)
- Environmental friendly.

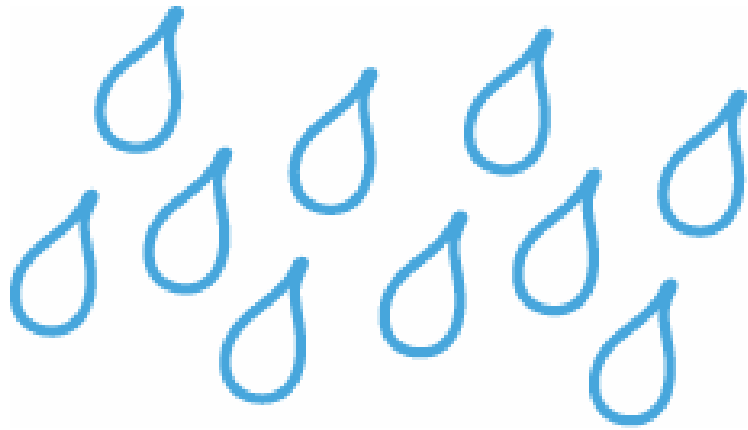
# 0% TREE



The extensive cutting down of trees worldwide is a major contributor to the global climate changes. Every day, a large area of forest is cut down, never to be replant again.

**ScandiROCK contains 0% trees!**

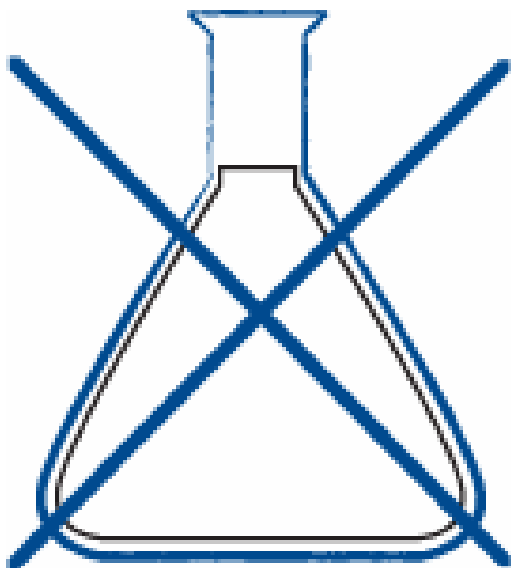
# 0% WATER



Soon we will no longer be able to take clean drinking water for granted. Many third world countries have already been faced with this serious problem. Industries using water in products or production methods contribute to this threat.

**ScandiROCK contains and uses 0% water!**

# 0% BLEACHES



Use of bleaches, acids, alkali or other potentially dangerous products is one of the main sources to air and water pollution. Furthermore, these products largely endanger our working conditions. ScandiROCK gets its whiteness from the Calcium Carbonate.

**ScandiROCK contains 0% bleaches!**

# CO<sub>2</sub> RELEASE

## Energy consumption and CO<sub>2</sub> release during production:

Unit Produkt	ENERGY CONSUMPTION				WATER	MAIN INGREDIENTS					RELEASE			
	Electricity	Oil	Coal	Sum		Tree	paper waste	Plastic	CaCO <sub>3</sub>	Agents	CO <sub>2</sub>	SO <sub>2</sub>	NO <sub>x</sub>	COD
	KWH/ton	kg/ton	kg/ton	Kcal	m <sup>3</sup> /ton	kg/ton	kg/ton	kg/ton	kg/ton	kg/ton	kg/ton	kg/ton	kg/ton	kg/ton
<b>ScandiROCK</b>	720	10	-		0,1	-	-	265	785	35,5	500	0,1	0,3	0,01
Calories/Unit	2236 kcal/ kwh	9200 kcal/kg	6400 kcal/kg											
Energy consu.	1.610.000	92.000	-	1.702.000										
<b>Pulp paper</b>	110	95	216		81,3	1.748	?	?	?	142,14	1093	0,82	2,74	3,98
Calories/Unit	2236 kcal/ kwh	9200 kcal/kg	6400 kcal/kg											
Energy consu.	246.000	874.000	1.382.000	2.502.000										
<b>Synth. paper</b>	123	82	520		144	?	1.217	?	?	117,23	1.736	0,36	2,57	2,03
Calories/Unit	2236 kcal/ kwh	9200 kcal/kg	6400 kcal/kg											
Energy consu.	275.000	754.000	3.328.000	4.357.000										

ScandiROCK releases only 50% CO<sub>2</sub> compared to paper made from wooden pulp due to low energy consumption

Full LCA available on [www.scandi.dk](http://www.scandi.dk)

# CO<sub>2</sub> RELEASE



## CO<sub>2</sub> release by incineration:

### ScandiROCK

(Consists of PE (Polyethylen) 20% + CaCO<sub>3</sub> 80%)

PE(C <sub>2</sub> H <sub>4</sub> )	2CO <sub>2</sub>	200kg PE x 88 28	= 628kg/TP
CaCO <sub>3</sub>	CO <sub>2</sub>	800kg CaCO <sub>3</sub> x 44 100	= 352kg/TP
			= <b>980kg/TP</b>

### Paper made from wooden pulp

(Consists of Fibers 80% + CaCO<sub>3</sub> 20%)

C <sub>6</sub> (H <sub>2</sub> O) <sub>5</sub>	6(CO <sub>2</sub> )	800kg fibers x 264 162	= 1.304kg/TP
CaCO <sub>3</sub>	CO <sub>2</sub>	200kg CaCO <sub>3</sub> x 44 100	= 88kg/TP
			= <b>1.392kg/TP</b>

### Synthetic paper

(Consists of PP 80% + CaCO<sub>3</sub> 20%)

PP(C <sub>3</sub> H <sub>6</sub> )	3CO <sub>2</sub>	800kg/TP x 132 42	= 2.514kg/TP
CaCO <sub>3</sub>	CO <sub>2</sub>	200kg/TP x 44 100	= 88kg/TP
			= <b>2.602kg/TP</b>

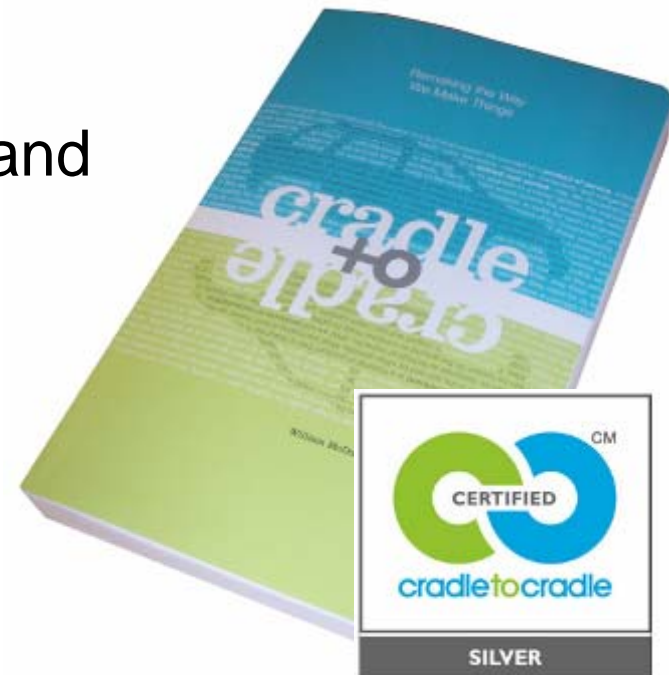
In smaller incineration plants at lower temperatures 400-500 C° the CaCO<sub>3</sub> does not burn; thus ScandiROCK releases even less CO<sub>2</sub>: 628kg/TP

ScandiROCK releases 30% less CO<sub>2</sub> than paper made from wooden pulp

# DISPOSAL

ScandiROCK is biologically degradable and leaves pure Calcium Carbonate ( $\text{CaCO}_3$ ) when exposed to UV light.

In Cradle-to-Cradle terminology ScandiROCK is a biological nutrient and should ideally be composted.

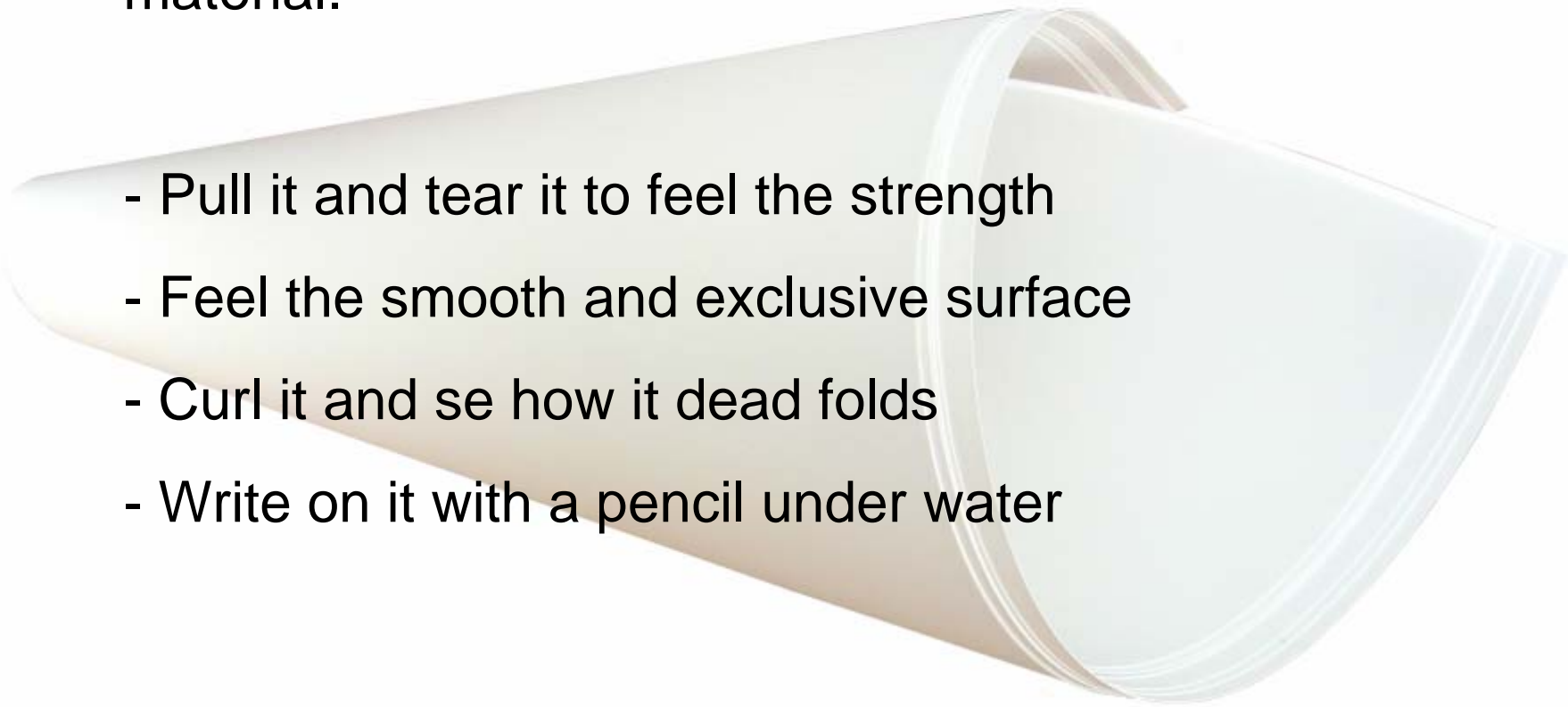


# APPLICATIONS



# EXPERIENCE

In order to fully understand ScandiROCK it is necessary to have a hands-on experience with the material.

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- Pull it and tear it to feel the strength
  - Feel the smooth and exclusive surface
  - Curl it and see how it dead folds
  - Write on it with a pencil under water

# QUESTIONS?



Thanks for your attention!

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