

Isoboard Thermal Insulation Board: Summary Assessment 2015

Resources					
Raw materials	Polystyrene	Flame Retard	Talc	Recycled Materials	Gas
Nature of raw materials	Virgin	Vigin	Virgin	Recycled	Virgin
% of raw materials in the final product	72%	2%	1%	18%	7%
% of recycled content				15%-20%	
Location of resource extraction	International (>3000km)	International (>3000km)	International (>3000km)	Local (<100km)	International (>3000km)
Type of transport used to move the raw materials to the place of manufacturing?	Ship	Ship	Ship	Truck	Ship
Additional environmental benefits/Innovation					

Manufacturing	Comments	
% use of energy from renewable resources	0%	
Energy use per ton of product	548 kwh/ton	
Water use per ton of product	1.16 kl/ton	
Has any of the following been implemented:		
Environmental Policy/Management system	No	Used oil Management System, Waste sorting and recycling System and noise reduction system all part of the on-site operations (but not formally documented).
Cleaner Production System	No	
Green Procurement Policy	Yes	Certain raw material suppliers are ISO14000 Certified
Environmental Awareness Policy	No	
Waste Management Policy	Yes	All plastic bags and plastic waste is sorted and sold to recyclers. Polystyrene off-cuts are re-used in process. Although no actual plan there is evidence of waste management practices on site. Used oil is collected by African Green Oil.
CSI Projects	No	

Is the project manufactured in South Africa?	Yes	
Does the product / manufacturing process make use of any chemicals, potential carcinogenic substances, greenhouse gases, etc	Yes	Polystyrene, Talc Powder, HBCD Flame retardant, HCFC, [MSDS's: PE White 11084/UV, PS Flame Retardant 01139, Nucleating Agent PSC 00308 - not harmful according to Directive 1999/45/EC). No phase-out plan for HCFCs but Isofoam subscribes to the Montreal Protocol.
Additional environmental benefits/Innovation		Between 1996 and 2013 Isofoam South Africa achieved the following reduction per m3 of product produced: 40% reduction in power consumption, 25% reduction in polystyrene consumption, 32% reduction of HBCD Flame Retardant and a 32% reduction of Hydrochlorofluorocarbons.

Product	Comments	
Does the product use electricity?	No	
Does it increase energy efficiency or reduce energy consumption?	Increases energy efficiency	
% of reduction of water use	N/A	
Harmful emissions during use?	No	
Does the product contain Volatile Organic Compound (VOC)?	No	
Additional environmental benefits / Innovation	Reduces energy consumption of insulated buildings (i.e. reduces heating and cooling requirements) and reduces overall carbon footprint of the building.	

Packaging & Distribution	Comments	
Materials used for packaging	PE Film	
Packaging material	Polyethylene	
Nature of the source of packaging	Processed Virgin	
% of recycled content of packaging	0%	
Is the package reusable or recyclable?	Recyclable	
Is there a takeback policy for your packaging?	No	

Is there a plan to reduce packaging?	No	Minimal packaging is provided in order to protect product.
Distance from manufacturing plant to market of final product	Regional (<500km)	
Type of transport used to move the product from the manufacturing plant to market	Truck	
Additional environmental benefits/Innovation		

End-of-life/Recyclability	Comments	
Expected lifespan of product	>20 years	
Can the product be easily separated into its single components for repair, re-use or recycling?	Yes	
% of the product that can be reused	70% - 80%	
% of the product that can be recycled	70% - 80%	
Support or take back system for re-processing or responsible disposal of product	No	Isofoam South Africa would accept used insulation boards, however, they would need to be clean and in a certain condition.
Any emissions or harmful substances released into the environment during the disassembly or degradation of the finished product?	No	
Additional environmental benefits/Innovation		