Isoboard Thermal Insulation Board: Summary Assessment - Recertification 2019

Resources	Comments				
Raw materials	Polystyrene	Flame Retard.	Talc	Recycled Mats (off-cuts of Isoboard)	Gas (134a/152a)
Nature of raw materials	Virgin	Virgin	Virgin	Recycled	Virgin
% of raw materials in the final product	72%	2%	1%	18%	7%
% of recycled content				15 - 20%	
Location of resource extraction	Internationally >3000km	Internationally >3000km	Internationally >3000km	Onsite	Internationally >3000km
Type of transport used to move the raw materials to the place of manufacturing?	SHIP	SHIP	SHIP	N/A-Onsite	SHIP
Additional environmental benefits/Innovation	Have brought out experts from Kuwait Head Office to see how the machinery and operations can be better optimised to reduce raw materials (decrease density of product) and improve product output. Re-use off-cuts back into the process, thus reducing the need for virgin materials. Nearly 20% of the product is made from recycled off-cuts). Using new gases and phasing out of HCFC before deadline. Continueing to look at further changes to the gases moving forward.				

Manufacturing	Comments	
% use of energy from renewable resources	0%	
Energy use per ton of product	823 kwh/ton	
Water use per ton of product	0.11 kl/ton	
Has any of the following been implemented:		
Environmental Policy/Management system	No	As per original assessment: Used oil Management System, Waste sorting and recycling System, Noise reduction system, All part of the OHSA (but not formally documented)
Cleaner Production System	No	A resource efficiency high level quick scan was carried out at the facility. However, it is unclear if any recommendations have been implemented.
Green Procurement Policy	No	
Environmental Awareness Policy	No	

Waste Management Policy	Yes	All plastic bags and waste is being sorted and sold to recyclers to reduce load on land fills. 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. Although it was noted that waste was not well managed on day of site visit in Feb 2019 with a lot of waste on-site.
CSI Projects	No	
Is the project manufactured in South Africa?	Yes	
Additional environmental benefits/Innovation		

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 Volitile Organic Compound (VOC)?	No
Additional environmental benefits/Innovation	Insulation is quick to install and can be used as a ceiling, thus being both a ceiling and insulating material / product. Isoboard can also be used to retrofit old buildings on the underside of existing roofs, especially old asbestos roofs, thus preventing the need of replacing the roof when wanting to upgrade / improve an old building. Also been used in aquaponics as the boards maintain optimimum temperature, which improve plant growth and potential for reduced energy for heating water. Isoboard also offers free rational design to optimise the amount of thermal insulation required in order to calculate the amount of energy to be consumed in heating and cooling a building.

Packaging & Distribution				
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	Nationally (<2000km)			
Type of transport used to move the product from the manufacturing plant to market	Truck			
Additional environmental benefits/Innovation				

End-of-life/Recyclability		
Expected lifespan of product	>20 years	
Can the product be easily separated into its single components for repair, re-use or recycling?	Repair / Reuse	
% of the product that can be reused	80-90%	Panels / boards can easily be dismantled or sections replaced, if needed.
% of the product that can be recycled	0-5%	In terms of recycling, the factory recycles off-cuts back into the process. So the recycling would most likely only be possible at their facility, thus with a low probablity of actually happening at regional general recycling facilities.
Support or take back system for re-processing or responsible disposal of product	No	
Any emissions or harmful substances released into the environment during the disassembly or degradation of the finished product?	No	
Additional environmental benefits/Innovation		