

**ARCHITECTURAL GUIDELINES:  
PRINCIPLES**

<b>ENVIRONMENTAL DESIGN DETERMINANTS</b>				
<b>PRINCIPLES</b>	<b>TECHNICAL SPECIFICATIONS</b>	<b>SPECIFIC EXCLUSIONS</b>	<b>PREFERENCES</b>	<b>COMMENTS</b>
<b>WATER</b>				
Reduce the use of water as much as possible	All plumbing fittings to be water saving including aerator taps on all basins, sinks and baths	Non-aerated taps		Water supply in the Western Cape and in South Africa generally is limited and is depleting natural resources in a way that affects the natural balance negatively
Reduce the use of water as much as possible	Low and/or dual flush toilet cisterns and shower heads	Toilet cisterns over 7 litres capacity More than one bath per house	Showers, sit-baths Appliances such as washing machines and dishwashers that can be regulated to use minimum water	
Recycle Water	Recycling is carried out at a village level but any individual house recycling system will be considered provided it meets health and Engineering specifications.			
<b>ENERGY</b>				
Reduce energy consumption as much as possible. Diversify energy sources to use most appropriate source	Water heating to be via Solar Panels – electrical or LP gas back-up optional	Stand-alone hot water cylinders Storage tanks on top of roof		Lynedoch receives more than adequate solar radiation to heat water for domestic use except for a few days in winter
	Cooking to be by LP gas hob	Electric hobs	LP Gas ovens	LP Gas is more energy efficient than electricity or paraffin for cooking
	Space heating to be via sunlight and good insulation with minimal electrical or LP Gas back-up		Low wattage space heaters as back-up	It is possible to attain sufficient warmth in winter through good insulation, sunlight and heat from cooking and occupants

Use low energy lighting and electrical appliances	Specify low energy lighting requirements. Also specify low energy requirements when buying electrical appliances etc.			Fluorescent may be energy efficient but bad for health. Use as much natural light as possible.
<b>MATERIALS</b>				
Use materials that are in ample supply and locally produced	See below for specific requirements		Locally produced materials	
Use materials that from renewable resources		Hardwoods from tropical forests that are being destroyed	Timber from sustainably grown forests	There are few timbers that are locally produced but it is possible to obtain imported timber from sustainable forests
Promote the use of safe materials.		Asbestos Formaldehyde	Natural wood Supawood is best of board products but still has formaldehyde	Health risks associated with manufacturing and use. Many substances, especially from petrochemical sources, emit toxic gases for much of their lifetime.
<b>GENERAL</b>				
<b>PRINCIPLES</b>	<b>TECHNICAL SPECIFICATIONS</b>	<b>SPECIFIC EXCLUSIONS</b>	<b>PREFERENCES</b>	<b>COMMENTS</b>
Buildings are seen as a coherent group and the architecture of buildings should not conflict with one another	-Each house must be a single main form with connected secondary forms such as garages.	The specific exclusions for the respective elements are without exception and an owner may not include any of the specific exclusions in any building plan submitted for approval.	As specified for each element.	A generic architecture is encouraged through strict control over primary architectural elements, the use of natural materials, limited, earthly colours and landscaping that responds to the surroundings.

	Materials used must conform to an approved specification for that element.			
	The roofs of the houses should all be a similar colour and of a similar pitch.			
	The colour of the houses must be very muted.			
<b>ROOFS</b>				
<b>PRINCIPLES</b>	<b>TECHNICAL SPECIFICATIONS</b>	<b>SPECIFIC EXCLUSIONS</b>	<b>PREFERENCES</b>	<b>COMMENTS</b>
Avoid the use of materials with a chemical content that damage the environment		Materials that are excluded: -IBR profile metal sheets -Fibre cement sheets -"kliplok" sheets	-Roof materials to be natural tiles, concrete tiles, thatch or corrugated metal roof sheeting.	Many chemical compounds in building materials can cause substantial external damage to the environment over time.
Use insulation materials (and materials in general) which do not release fibres into the atmosphere, in particular the internal atmosphere where they can be breathed in.		-'Think Pink' -Glass fibre wool -Any material containing Asbestos	Organic materials, e.g. cellulose fibres, Other safe materials e.g. polyester, isotherm etc.	Organic materials are most renewable and most benign from a health perspective.
-To minimize the impact of the way the building is constructed. -Pitched roof ensures greater run-off and requires less water proofing. -Pitched roof has the potential to provide more internal space	-Main roof pitch to be greater than 25 degrees unless house is double storey in which case the roof pitch to conform with that of lean-to roofs as specified below. - Lean to roofs to have a pitch of between 5 and 10 degrees. - Roofs must extend over the walls below.			- The architecture of the buildings should not conflict with one another in the landscape to the detriment of the environment. The visibility of the site requires that the buildings are seen as a coherent group rather than a disparate collection of individuals.
	-Lean-to roofs and Flat slabs		- Flat concrete roof slabs are allowed.	-Enough scope for variety with the

	not to exceed a total of 50% of overall roof area. -Lean-to roofs and balcony slabs on street side of building not to exceed 3m in depth from the front of the building.			specified constraints
	-Solar panels must be mounted in the plane of the roof.		-Storage tank not allowed on the roof	All efforts must be made to reduce the visual impact of all buildings.
Ensure that visual impact on the surrounding environment is limited	Dormer windows, skylights and roof lights are allowed but must not be greater than 20% of the roof area			

#### EXTERNAL WALLS

PRINCIPLES	TECHNICAL SPECIFICATIONS	SPECIFIC EXCLUSIONS	PREFERENCES	COMMENTS
To reduce the total quantity of embodied energy and resources used to construct buildings	Masonry walls to comply with National Building Regulations (NBR). Timber or Everite sheets to comply with NBR and insulation values.	-face brick, -exposed concrete block work, -decorative plaster work such as Spanish style plaster or ornate mouldings. -Timber or other panels on street related buildings – ie. Can only be used on rear of building	Materials must be selected to ensure the lowest possible embodied energy. This is determined by the resource content of the masonry material, the manufacturing process – how energy intensive it is, and the distance the materials need to be transported to site. Materials that are manufactured on site, with local materials such as earth or sand, and with low cement content and low fuel input for machinery would thus be the best option.	Use on-site clay for brick-making, pine from local logging companies, joinery work from local manufacturers.

#### COLOURS AND FINISHES

PRINCIPLES	TECHNICAL	SPECIFIC EXCLUSIONS	PREFERENCES	COMMENTS
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	<b>SPECIFICATIONS</b>			
-Reduce visual impact when viewed from a distance. -Avoid the use of materials with a chemical content that damage the environment	-Wall colours to be as per Breathecoat catalogue colours, Gobi Sand, Bronze Sand, Sandstone, Soap Stone, Calcite, Ochre Silica -No more than two colours to be used on one building and where two colours are used the darker one should be at the base of the building.	All petrochemical paints for wall applications.	-Buildings should be coloured in a way that blends into the natural environment. -Natural paints or sealants for doors, windows and fittings.	-Petrochemical based paints exude small toxic emissions for most of their functional health, but they do impact on health and the environment. -Health risk and environmental damage involved in manufacturing process of petrochemical based paints. -Many chemical compounds in building materials can cause substantial external damage to the environment over time.
-Reduce visual impact when viewed from a distance.	Windows and doors to be natural wood or natural anodised aluminium or one of three colours – AS PER MIDAS Colour Chart; Mallard Green (8567-5), Yacht Blue (8469-5) and Etruscan Red (8315-5)	All petrochemical paints for wall applications.		Most suppliers will provide the information on request, but rather find another supplier in the event that you get a supplier that is either unwilling to divulge information or is simply ignorant.
	All trims such as fascia boards, barge boards, downpipes, verandah supports, etc. are to be natural wood or one of three colours – AS PER MIDAS Colour Chart; Mallard Green (8567-5), Yacht Blue (8469-5) and Etruscan Red (8315-5)			
Reduce heat by using reflective colours.	Roof colour to be light grey or natural galvanized.			Light colours reflect heat.
-To enhance the use of natural energy as a means to heat the building			Charcoal grey if the air in the roof space is to be used as a means to heat the building.	Darker colours absorb heat.
<b>CHIMNEYS</b>				

<b>PRINCIPLES</b>	<b>TECHNICAL SPECIFICATIONS</b>	<b>SPECIFIC EXCLUSIONS</b>	<b>PREFERENCES</b>	<b>COMMENTS</b>
-Ensure that visual impact on the surrounding environment is limited	-Maximum total circumference to be 4m for any freestanding element or from where the chimney emerges from the roof. -Maximum height of chimney to be no higher than 1m above apex of roof.		All efforts must be made to reduce the visual impact of all buildings.	
<b>DOORS AND WINDOWS</b>				
<b>PRINCIPLES</b>	<b>TECHNICAL SPECIFICATIONS</b>	<b>SPECIFIC EXCLUSIONS</b>	<b>PREFERENCES</b>	<b>COMMENTS</b>
-If materials are imported from other regions in South Africa or elsewhere in the world, make sure the materials are from sustainably managed sources.	-All windows to be vertical or equally proportioned, not horizontal. -Garage doors to be single type only with a maximum of 3 allowed. -Awnings to match window and door colour.	-Winblocks -Striped awnings	-Timber or aluminium windows with natural finishes -Meranti is a wood that is often used, but which normally comes from unsustainably harvested forests in Brazil and Indonesia. Alternatives would be properly treated gums from the Southern Cape.	-Vertical proportion to simplify structure and to provide some consistency across the EcoVillage. -Most suppliers will provide the information on request, but rather find another supplier in the event that you get a supplier that is either unwilling to divulge information or is simply ignorant.
<b>BALCONIES AND TERRACES</b>				
-Ensure that visual impact on the village environment is limited.	-All balustrades to be at least 75% void. -Colour to be natural wood or trim colours.	-Diagonal members		
<b>BOUNDARY WALLS AND FENCES</b>				
-Ensure that visual impact on the village	-Boundary walls on the street side of the house to	-Fences on the street side of the building	Boundary walls and fences should be unobstrusive, both in terms of the	None

<p>environment is limited.          -Promote a coherent and open streetscape with good surveillance from houses.          Promote open rear spaces for sense of space and surveillance</p>	<p>be a maximum of 900mm high.          -Rear boundaries only to be enclosed with fences or hedges or combination of wall and fence.          -No boundary wall to be higher than 900mm above NGL.          -Fences and hedges to be max of 1.8m high          -All walls to match walls of the main house in colour and finish.</p>	<p>-Vibracrete or concrete walls          -Security wires of any kind on top or sides of the walls or fences</p>	<p>materials used and how it is painted or treated.</p>	
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**MISCELLANEOUS**

<b>PRINCIPLES</b>	<b>TECHNICAL SPECIFICATIONS</b>	<b>SPECIFIC EXCLUSIONS</b>	<b>PREFERENCES</b>	<b>COMMENTS</b>
-Ensure that visual impact on the surrounding environment is limited	<b>Services:</b> In general all services such as pool filtration systems, satellite dishes, refuse bins washing lines, air conditioner units, are to be concealed from the street and the neighbours, behind walls or screens and the like.			
-Ensure that visual impact on the surrounding environment is limited	<b>Plumbing:</b> All plumbing to be concealed from view from the street, except gutters and downpipes.			
-Ensure that visual impact on the surrounding environment is limited	<b>Satellite Dishes and Aerials:</b> Satellite dishes and aerials not to be mounted higher			

	than the eaves of the roof.			
<b>LANDSCAPE GUIDELINES</b>				
<b>PRINCIPLES</b>	<b>TECHNICAL SPECIFICATIONS</b>	<b>SPECIFIC EXCLUSIONS</b>	<b>PREFERENCES</b>	<b>COMMENTS</b>
<p><b>PLANTING:</b> To ensure a consistency of planting with the natural vegetation, a promotion of appropriate biodiversity and to ensure a minimum standard of landscaping throughout. A preference for indigenous plants is promoted so as to not introduce alien vegetation into the EcoVillage and also to promote water wise landscaping.</p>	.	<p><b>-Street Zone:</b> Certain types of plants and trees specifically excluded See list below. <b>-Rear Zone:</b> No trees or lawns allowed in this zone.</p>	<p><b>-Street zone:</b> A select range of plants are preferred in this zone. See plant list below. <b>-Rear Zone:</b> A restricted range of planting is allowed in this zone to ensure a smooth transition from the nature area of the estate to the domestic areas. See plant list below. surface water run-off and increase percolation into the ground.</p>	Planting of trees and shrubs should enhance the natural diversity of the environment.
<p><b>EXTERIOR LIGHTING:</b> Reduce light pollution and save energy.</p>	These will be low level light bollards	Area floodlighting	All exterior lighting is to be low level and low intensity, Infra-red controlled spot lights may be provided on the street side for security	
<p><b>HARD LANDSCAPING:</b> Prevent rainwater run-off that could have negative effects on the surrounding environment. -Encourage maximum percolation on the site.</p>	A maximum of 75% of the site (including the footprint of the house) is allowed to be hardened and a preference for porous paving systems is promoted.	Tarmac		To reduce surface water run-off and increase percolation into the ground.