THORNEHILL ECO ESTATE | DESIGN GUIDELINES

Contents

INTRODUCTION

These guidelines aim to inform the building aesthetics of Thornehill Eco Estate in relation to the Stilbaai landscape. This covers the design of new buildings as well as any additions and modifications to them.

Covering an area of approximately 29 Hectares, Thornehill Eco Estate is located within natural fynbos hills with magnificent views over the river, ocean, the Langeberg Mountains in the distance and the town of Stilbaai. This landscape encompasses a rural, coastal feel that supports and encourages off the grid living.

Thornehill Eco Estate comprises 20 off-the-grid residential stands of 700m² each.

The character of the architecture should be simple, neutral and unimposing on the area within which it is located. The natural vegetation and landscape should inform the design, with all buildings blending into this setting, almost seeming to disappear into the landscape, rather than standing out.

THE CONTEXT

Stilbaai is situated on the Garden Route in the Western Cape Province. It was originally a small fishing town, where the original visvywers, aka Stilbaai tidal fish traps, can still be seen. Although it has expanded in recent years, the town's holiday feel is preserved thanks to the white sandy beaches, mild weather and the navigable Goukou estuary snaking through the adjoining valleys and town all the way to the ocean. As a coastal town, Stilbaai is ideal for outdoor activities and living.

Located on the eastern side of Stilbaai, Thornehill Eco Estate is close to the popular Lappiesbaai swimming beach, a few restaurants; Pauline Bohen nature reserve which is home to a variety of local flowers, birds, and wildlife and less than a 5-minute drive from the western side of Stilbaai, where most shops and businesses are located.

THE DESIGN PHILOSOPHY

Our architectural design vision is to take the simplicity of the current Stilbaai design vernacular and put a modern twist to it. The design concept of these eco units encompass and are in close response to the unique South African climate and lifestyle whilst encouraging a light carbon footprint.

We aim for the architectural design to be a continuation of the already beautiful landscape it is situated in. Surrounded by Fynbos and indigenous trees, we want to create a nature-inspired hub that enhances and encourages outside living, to bring nature into the home, and open the home up to the outside.

Dark coloured and mid-tone walls, natural stone elements, dark coloured aluminium window frames and timber shutters, as well as mono-pitched metal sheet roofing refer to a fragmented contemporary style, which is sympathetic towards nature. The combination of the above elements will depict the development.

DEFINITIONS

All definitions will be according to the Hessequa Zoning Scheme by-law and the South African National Standard (SANS10400)

ARCHITECTURAL DESIGN GUIDELINES

This manual is supplementary to the South African National Standards (SANS 10400) and the Hessequa Municipal by-law.

The Home Owner's Association **(hereafter referred to as the HOA)** of Thornehill Eco Estate, reserves the right to make amendments and changes to this manual at any time. These guidelines will be subject to periodical revision. Each Member of the HOA is bound by the architectural guidelines.

Plans presented to HOA will be scrutinised and approved or rejected by the HOA. Once plans are approved by Thornehill HOA, it can be presented to the local municipality for their approval. **Construction can only commence after approval by the Thornehill HOA <u>and</u> Hessequa municipality are obtained.**

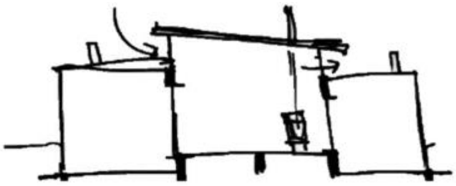
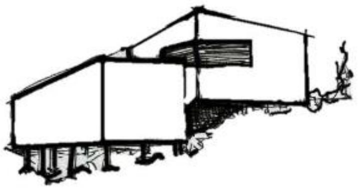
Any consent use or relaxations will be subject to the HOA's discretion and prior approval, as well as to the local municipality's approval.

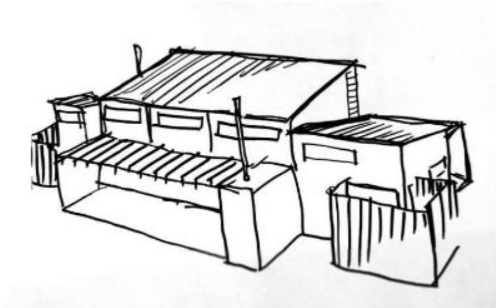
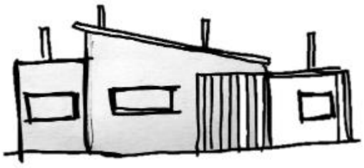
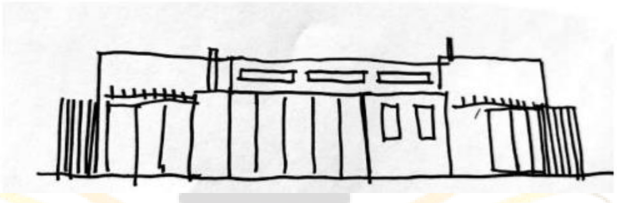
ARCHITECTURAL PRINCIPLES

As believed by architect Mies van der Rohe, **"Less is more"**, is the perfect means to explain what we want to achieve. Simplicity of form requires, in turn, excellent finishing and construction quality. Chosen materials should age well over time and require minimal maintenance.

By using forms inspired by nature, different textures and a limited colour palette, we aim to accentuate what the surrounding environment has to offer, rather than take away from it. Great emphasis should be placed on scale and proportion of the eco units within the natural landscape.

Building forms should be composed of main and secondary plan elements connected by smaller connecting forms e.g., slanted roofs connected via smaller flat roofs.

TOPOGRAPHY

The majority of sites at Thornehill Eco Estate have steep gradients and it is therefore imperative that each site's topography be taken into account when designing a dwelling. Buildings should fit comfortably into the natural contours and orientation of the site and can be stepped or terraced over the site. To this end the houses should remain single storey or be split-level.

Levelling of the erf to create a building platform for the entire building will not be allowed.

Natural ground levels (NGL) are considered to be the levels documented on the existing contour survey. Any deviation has to be confirmed by a registered land surveyor.

BUILDING PARAMETERS

- **ZONING**

Residential II (Group housing) – consisting of 20 erven of 700 square meters.

Open Space III (Private Open Space) - no structures permitted.

- **COVERAGE**

Siting/coverage should be carefully considered to protect the indigenous flora and to reduce the visual impact of the dwellings within the setting. The coverage comprises all roofed areas and must be within each site's building lines.

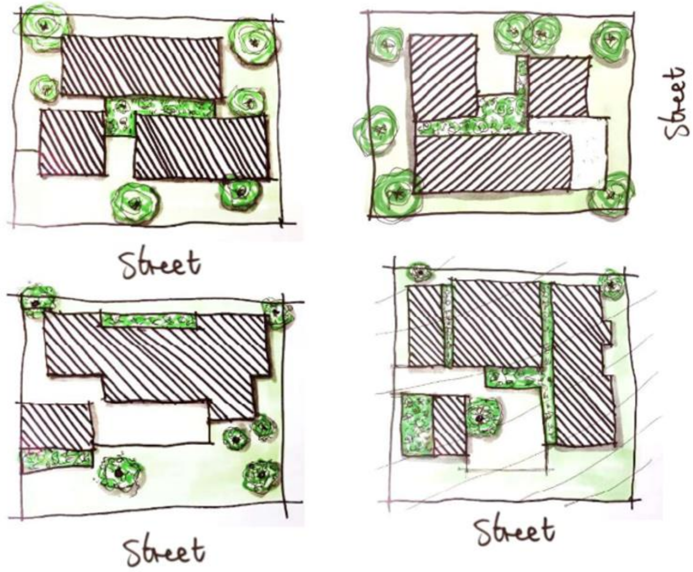
A 50% or 350m² coverage (whichever is smaller) will be allowed per dwelling. Only single storey dwellings will be allowed.

- **HEIGHT RESTRICTIONS**

Due to the hilly landscape, we aim to incorporate a segmented design approach according to what each site dictates in order to not disturb the current landscape. All units will be single storey dwellings with subtle level changes according to the requirements of the site.

Each site's dwelling will have a height restriction of **5m** from **natural ground level** to apex of roof. It is important that the design remains part of the landscape and does not stand out on top of it.

No basements will be allowed.



- **BUILDING LINES**

Residential II (Group housing)

Street building line: Minimum of 4m

Side and rear building lines: 2m

Open Space III (Private Open Space)

Building lines: No structures permitted, except as per landscaping guidelines.

- **VEHICULAR ACCESS & PARKING**

Residential II (Group housing)

Vehicular access: Only one vehicular access of minimum 3m and maximum 6m wide will be permitted.

Parking requirements: At least one off-road parking bay per unit

Open Space III (Private Open Space)

Vehicular access: As indicated on the approved SDP (see attached diagrams).

Parking requirements: As indicated on the approved SDP (see attached diagrams).

ARCHITECTURAL DESIGN MANUAL

WALLS

Brick walls will be used for all screening walls and braai areas. This gives an opportunity for the use of textured scrape plaster/smooth plaster/natural stone, and creates a firm base for the rest of the design. In order to promote green construction, SIPS (structural insulated panels) or light steel construction will be encouraged for the main structures. The finishing thereof can be a combination of metal sheet cladding (AZ200 for coastal areas) and horizontal or vertical timber cladding, in hardwoods such as Balau, Garapa, Jatoba or Rhino wood.

The use of artificial stone will not be allowed. Rising plinth walls, used to create level building platforms, should be dark in colour.

BOUNDARY WALLS, SCREENS AND GATES

We aim for the architectural design to be a continuation of the already beautiful landscape it is situated in. Surrounded by Fynbos and indigenous trees, we want to create a nature-inspired hub that enhances and encourages outside living, to bring nature into the home, and open the home up to the outside.

In light of the above, no erf will be allowed to have boundary walls all the way around. **Partial enclosure** to a maximum of 15% of the erf area will be accepted.

ClearVu fencing will be accepted for boundary enclosures, with the incorporation of natural stone feature walls or columns. No boundary or screen wall should exceed 1.5m height, as measured from natural ground level.

Privacy from the street front and the neighbours can be maintained by means of planting, or layout design, or by the construction of a screen wall of maximum 1.8m high and not less than three meters from any erf boundary.

All gates should consist out of ClearVu fencing or timber/aluminium slats in approved colours, in a matching metal frame. The height of any gate should match that of an adjoining fence. No palisade fencing or gates will be accepted.

All vehicular gates will be subject to scrutiny by the HOA.

RETAINING WALLS

Where applicable, retaining walls should be a combination of brick and mortar or stone gabions. Existing topography must be considered when levels of buildings and gardens are planned.

Low retaining structures that are sympathetic to the natural contours of the site will be allowed, provided that such structures are not higher than 1.5m.

If a retaining structure of more than 1.5m is required it should be designed as a series of consecutive retaining walls set back at least 1m in plan.

WALL COLOURS & FINISHES

Colours in general can so easily be used out of context. We want to use a colour palette that will be a continuation of the landscape, and not be distracting from it. Using colours and finishes such as charcoal, weathered timber, stone and metals in the correct way, will blend into nature rather than sticking out from it.

Very specific to Stilbaai is the stone that is found there. Typically used for stone walls and cladding, this design element sets the perfect tone of being grounded in nature. This will be a big part of the design aesthetic, to bring what is locally available and sourced into the design process. It is important to use this element respectfully and with restraint.

Weathered or rusted metal could also be used as accents to bring nature inspired colour accents into the design aesthetic. Grey tones from weathered timber will also be used respectfully to soften the building facade, as well as give a warm feel to the design.

Darker or muted earth tones should be used for the walls to allow buildings to blend in with nature.

Colours can be chosen from the following list (with a 50% darker or lighter deviation allowance where needed and approved):

House wall colours:

Plascon Sushi Wrap

Plascon Phantom Ship

Feature garden wall colours:

Plascon Addo Skin

Plascon Bleached Baobab

ROOFS

Major plan forms will have different levels due to the topography of each site and it is recommended that these are roofed individually. Mono-pitched roofs (of 10° max), at different heights and directions, are preferred to create a dynamic design aesthetic that bear a resemblance to the landscape. Roof overhangs of 600mm are encouraged and no parapets will be allowed.

The following-pre-coloured AZ200 profiled metal roof sheeting will be permitted:

Clean COLORBOND steel in African Charcoal; Ore Grey; Alley Matt or Iron Matt.

A flat roof or open veranda should serve as a connecting element between the major plan forms. Living roofs can be incorporated by planting indigenous Fynbos on flat, concrete roofs, with sufficient torch-on waterproofing and drainage provided on the roofs. The extent of concrete flat roofs will be limited to 20% of the total footprint of the house.

OUTBUILDINGS AND GARAGES

Outbuildings must correspond with the form and geometry of the main house. Outbuildings shall not exceed 30% of the main building footprint. The coverage of the outbuildings will be part of the maximum allowable coverage.

Garages may form part of the major plan form. Free-standing or semi-detached garages should be roofed with the same roofing as the major structures, with linking elements such as flat roofs to other main structures, where applicable.

GUTTERS AND DOWNPIPES

Where gutters are used, aluminium watertight Ogee type gutters, or PVC half-round type gutters, painted to match roof colour, should be utilised.

Where gutters and downpipes are omitted, provision should be made on ground level to prevent any erosion from storm water runoff.

DOORS & WINDOWS

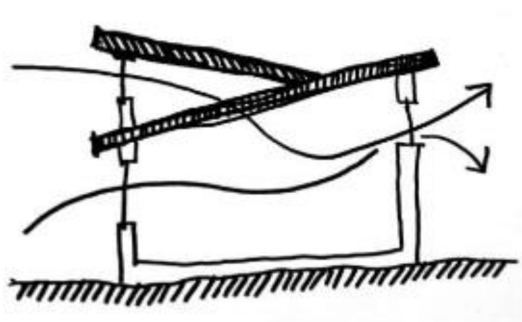
The use of large glass windows and doors are proposed to create an opportunity for indoor-outdoor living. Where appropriate, sliding pocket doors or folding stacking doors will be used to fully open the house to the outside and showcase the view.

All door/s and window frames should be black or charcoal powder coated aluminium. Windows should be strategically placed to maximise light entering the space and for the integration of cross ventilation.

It is recommended to utilise thinner clerestory window strips below the roofline to maximise natural light and obtain more privacy where required.

No reflective or "mirror" glass will be allowed.



GARAGE DOORS

Natural timber or powder coated aluminium garage doors will be encouraged. If painted, garage doors must match colour of the walls or window/ door colour. Garage doors that face the street must have a pergola of at least 900mm deep.
Two single garage doors or one double door will be allowed.

CHIMNEYS

Chimneys must project at least 1m above the roof, through which the chimney penetrates. Chimneys must be either stainless steel or black powder coated steel pipes, that can withstand coastal conditions.

VERANDAS AND PERGOLAS

General

Using verandas, porches and pergolas is encouraged - the street front serves as a transitional space between the road or front garden and the residence. Contemporary simple and minimalist structures are preferred, no decorative detailing is allowed.

Structure

- Timber (preferably Garapa, Balau or Rhino wood) or
- Steel in combination with timber are permitted. Pergolas may be covered with slats. The use of climbing or hanging plants is encouraged.

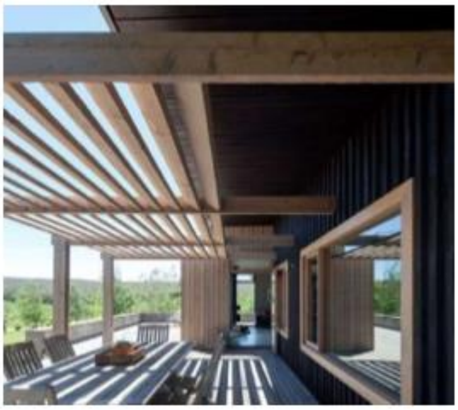
Finishes and Colours

- Veranda and pergola posts may be finished with the following: Natural timber clear finish.
- Steel/timber posts, if painted, must match the colour of window and doors of the house.

Roofing

Roofing of verandas is to be an extension of the roof; however a lean-to with metal sheeting is allowed. Opaque polycarbonate sheeting may be used where not visible on elevation, but must be covered with slats from underneath.

BALCONIES AND ROOF TERRACES



Provision has been made for balconies. It should be noted the section "Wall Heights" still applies.

General Specifications

If a balcony is used it may not address adjacent residential sites and may only be positioned so that it addresses either the street or the communal open space areas.

Balcony roofs must be in character with that of the main house, and may be an extension of the major plan form's roof. Balcony supports follow the specifications for the supports of verandas and pergolas. Balconies, if roofed, must follow the specifications of the roofing of verandas and pergolas. A balcony roof may, however also be an extension of the roof of the major plan form.

BALUSTRADES AND RAILINGS

Balustrade to balconies / terraces will conform to National Building Regulations. Balustrades should be horizontally proportioned with strong horizontal linear elements.

Balustrades can be constructed from solid hardwood, stainless steel, epoxy coated hot dipped galvanised steel, or the combination thereof. Typical details will be available. Glass will also be considered, where justified.

BALCONY SCREEN WALLS/PRIVACY SCREENS

This may be done by use of a timber lattice or screen to l,8m above FFL of the balcony.

FLOOR FINISHES

Floor finishes to balconies must be muted natural tones.

GENERAL

Plumbing pipes

Plumbing pipes and projections must be **fully concealed** by means of plumbing recesses within walls. These recesses should be covered with timber or aluminium slats and be accessible where necessary.

Temporary structures

No temporary structures are permitted within the erf, including Wendy houses.

Satellite dishes and aerials

Satellite dishes and TV aerials are **permitted**, and fibre services can also be utilized for connectivity and TV.

Solar panels

Solar panels should be mounted flush with the roof and in an unobtrusive manner.

Air Conditioning

Air conditioning condenser units should be installed at ground level, and screened properly. Ideally, a recess should be designed into an external wall and covered with a slatted aluminium screen in the same colour as the house walls to hide the AC condenser unit.

Swimming Pools

Gunite and fibreglass pools in dark colours will be allowed as per SANS and the Hessequa by-law. A farmhouse type pool dam or similar will be preferred. Where applicable, pool fences/gates must be Clear view fencing. Timber pool decks, no higher than 500mm above natural ground level, will be allowed.

Pool filtration systems and pumps must be screened with either a natural stone or masonry wall in a dark colour. Pool pumps to be fully enclosed to reduce noise, and for it not to be seen from the street.

No fake rocks or rock pools will be permitted. Pools or ponds shall be located within the building zone.

Pool backwash water shall be pumped into grey water system for re-use. It is recommended to use an eco-grater or similar product.

Pool colours to be grey, natural cement or black. All pools will be built in.

Clothes Lines and Bin Stores

Clothes lines and refuse bins must be screened by a 2,1m wall or concealed within a service court 2 x 2m min. Walls are to be either natural stone or plastered masonry or the area screened by timber screens to match main house. Washing lines should not be visible from neighbouring property or street.

Rainwater Tanks

Collection of rainwater in rainwater tanks will be compulsory, the type and placement of all rainwater tanks will be subject to the scrutiny of the Association. A minimum size of two tanks of 2500l or one 5000l tank with a booster pump will be required and should be screened with a wall, if not underground.

External Lighting

External lighting should be discreet and kept to a minimum. No external pole mounted street lamps will be allowed. Landscape lights must be discreet and not higher than 900mm.

Rainwater goods

Rainwater goods which are exposed must be painted to match the roof colour or in tones that match the colour list. Each site must have water catchment systems to collect all rainwater by means of at least one 5000l or two 2500l water storage tank/s. All water storage tanks need to be concealed from street view by means of timber slatted screens.

Sewer

Each site will have to have a conservancy tank or mini package plant for all sewer and drainage.

Fire protection

All buildings must be equipped with fire extinguishers, and any other fire protection as required in terms with the National Building Regulations SANS 10400 Part T and specified by a Hessequa Local Authority Fire Department accredited fire consultant.

Due to Fynbos on the site, there is a higher-than-normal fire risk.

The flues of fireplaces should be fitted with mesh spark arrestors. Braai places shall be built with flues also fitted with mesh spark arrestors.

If fire pits are used, they should be positioned as far away from natural Fynbos vegetation as possible.

Driveways

Driveways will be a choice between charcoal coloured cobblestone paving, grass block paving or similar, or exposed aggregate paving, all to be in earth tone colours and pre-approved by the aesthetic committee. No tar will be permitted.

All driveways will not exceed more than 5m along any street edge.

Driveways will double up as guest parking and must be situated within the building zone.

Decking

Timber decking: Garapa, Balau or Rhino wood will be permitted material choices for this.

1. BUILDING PLAN APPROVAL PROCESS

1.1 Register project at POA of Thornehill Eco Estate
1.2 Provide information to be reflected on invoice, to POA.
1.3 Invoice will be prepared by BVA and forwarded to POA for client receipt.
1.4 Payment of **R5 000 (Excluding VAT)** for the **Architectural Scrutiny Fee** to be made into the following account :

4id ARCHITECTURE & INTERIOR, FNB Cheque account, No: 62373155053, Branch code: 200912
E-mail : chrisna@4id.co.za

1.5 Submit Sketch plans Stage 1
1.6 Upon receipt of payment, Design Review Committee will scrutinize and submit findings to owner and POA office.

All plans for the construction of buildings, their modification or restoration, should be prepared by an architect / draughtsman who is registered with the **SACAP The South African Council for the Architectural Profession** www.sacapsa.com

2. Regulations:

2.1. It is recorded that the local authority has approved the terms and conditions of this manual. No amendments to, or departures from, the terms and conditions of this manual will be allowed without the written consent from a duly authorised representative of the local authority.

2.2. The owner must obtain from the Association, prior to the submission of the design concept and sketch plans, a list of the requirements relating to the details to be provided for the plan approval process and also obtain all documentation including erf diagrams, services connection diagrams and contour plans that may be required in order to facilitate the design process.

2.3. It will be the responsibility of an owner to ensure that he or she is in possession of the current version of the design manual.

2.4. Submissions will be considered within the timeframes stipulated in the National Building Regulations Schedule, i.e., within 30 days for houses smaller than 350 m2.

2.5. Should the design change markedly from the original approved sketch proposal- the design will need to be re-submitted and submission fees will be payable to the Association again.

2.6. The approval process will involve the following stages:

2.6.1 **First Stage**: The detailed plans must be submitted in pdf format to the **Design Review Committee** for approval. (See checklist below)

After the plans have been approved by the Design Review Committee, a letter and plans with a stamp of approval will be e-mailed back to the owner.

2.6.2 **Second Stage**: After the detailed design and working drawings have been approved, they must be submitted to the local authority (Hessequa Municipality) for approval. Certain prescribed fees will be payable at this stage to the local authority. Should the requirements of the local authority or any other statutory authority or the National Building Regulations conflict with this design manual then such other requirements will take precedence. The more restrictive measure will also always prevail. Applications for any waivers of the National Building Regulation or any other Municipal regulations should be approved by the Property Owner's Association beforehand.

2.6.3 The POA reserves the right to enforce the necessary amendments to any site layout, building, landscaping or other design which may be deemed necessary to satisfy the conditions laid down in the Manual for Development and Design. It can also call for further information, drawings, samples of materials, etc., as may be deemed necessary to make a proper evaluation and review of submissions.

THORNEHILL ECO ESTATE | CHECKLIST

OWNER		
ERF NO:	**SITE AREA**	**AREA OF HOUSE**

ARCHITECTURAL PROFESSIONAL		
PRACTICE:		**SACAP REG NO:**

To be completed and submitted with the building plans to Design Review Committee.

☐ Site plan
☐ Roof plan
☐ Floor plans
☐ Electrical plan with exterior lighting schedule
☐ All Elevations
☐ Two sections minimum (through the main structure indicating relevant heights)
☐ Position of driveway and

☐ All hard landscaping finishes

DESIGN CONTROL

☐ Contours on site
☐ Building lines indicated
☐ Total length of boundary walls
☐ Parking Bays
☐ Position of driveway width at kerb edge
☐ Positions of protected trees
☐ Rainwater goods
☐ Conservancy tanks
☐ All plumbing concealed from roadway and neighbour erven. Detail drawing required.
☐ Drainage
☐ All hard landscaping finishes
☐ Soft landscaping layout - including plant species
☐ Position of pool, pumps and filters
☐ Position/s of pergolas
☐ Shutters (exterior shutters detail drawings required)
☐ Screen - drying yard walls and handrails indicated on plan – detail drawing required.
☐ All boundary wall elevations
☐ Adjacent areas of private open space arid verge
☐ Details of storm water handling and elevations where relevant
☐ Roof pitch and eave overhang
☐ Position of aerials and satellite dishes
☐ Position of solar panels, A/C units, gas bottles and HWC

FINISHES AND EXTERNAL FIXTURES SCHEDULE TO BE INCLUDED IN DRAWINGS

☐ Roof and rainwater goods
☐ Walls, boundary- and retaining walls: Paint colours cladding etc
☐ Chimney cowl
☐ All doors (incl. garage and windows, colour & material)
☐ Shutters
☐ Walls
☐ Driveway

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