



# Bahama Beach

*Premium quality, hurricane safe,  
sustainable, modular homes*

# *The Bahama Beach*

*3 beds, 2 baths, 105m2/1130ft2*

*The Bahama Beach is a delightful and spacious option for those looking for a sustainable and hurricane-resistant modular home.*

*It features three bedrooms and an open plan living area that opens up to a full-width covered terrace, providing ample space for outdoor living and entertaining.*



*The home is built using sustainable materials and is supplied in a flat-pack kit format, making it easy to transport and assemble.*

*With its hurricane-resistant design and sustainable construction, this Bauhu modular home is a durable and eco-friendly option for those looking for a home in the Caribbean or other areas prone to strong winds and storms.*





# Living

*Our interior designers have carefully selected a range of high-quality décor and finishes to provide a spacious and comfortable open plan living space with sliding windows to benefit from the covered terrace.*

*The home is accessed by way of a feature entrance door and the bedrooms give off the living room. The living room windows open onto a full length outside terrace with ample space for outdoor dining.*





## *The Master Bedroom*

*The master bedroom suite, presented with a super king-sized bed offers an attractive and well-appointed room with ample space for a large closet and additional furniture.*

*The adjacent private bathroom provides en-suite facilities.*



# *The Bathrooms*

*The en-suite master bathroom has a wall hung double vanity cabinet and a white ceramic toilet. A large 'Italian' shower blends perfectly into the room with a hand shower and rain shower head.*

*The guest bathroom provides a single wall mounted vanity.*





# *The Guest Bedroom*

*The well thought out guest bedroom offers a comfortable and spacious bedroom with ample room for a dressing table and further free-standing furniture.*

*Presented with a king-sized bed this bedroom can also accept two single beds or alternative furnishing options.*





# *The Den Bedroom*

*A cosy kid's room, snug or a spacious study this third bedroom is accessed from the hallway and provides a flexible extra room depending on individual needs.*

*The adjacent bathroom provides shower and cloakroom facilities.*





# Floorplan

Gross ground floor area: 1130ft<sup>2</sup> / 105m<sup>2</sup>

Living room, kitchen: 237ft<sup>2</sup> / 22m<sup>2</sup>

Master bedroom: 172ft<sup>2</sup> / 16m<sup>2</sup>

Guest bedroom: 119ft<sup>2</sup> / 11m<sup>2</sup>

Den bedroom: 65ft<sup>2</sup> / 6m<sup>2</sup>

Master bathroom: 65ft<sup>2</sup> / 6m<sup>2</sup>

Guest bathroom: 86ft<sup>2</sup> / 8m<sup>2</sup>

Covered terrace: 270ft<sup>2</sup> / 25m<sup>2</sup>

*This presentation is non-contractual and intended as a guide.*





BAUHU



About

*Bauhu modular home features*

*Bauhu*  
Homes



# Our homes...

*Our buildings are made of steel, which is strong and is protected by a galvanized coating generally accepted to provide a time to first maintenance of a 100 years. With this highly effective galvanization process, steel profiles resist even the most humid regions.*

*They are packed with insulation, reducing energy consumption. Once clad the frame is not exposed to the elements and is airtight.*

*The kit is made in a factory and delivered in sections, so the structure can be erected very quickly. Buildings are engineered to ASCE 7-16/22 (The American Society of Civil Engineers Code) and designed for high wind and seismic locations.*

*The building envelope is watertight and airtight. The windows and doors are fitted with impact resistant glass. All the building materials are completely termite proof.*

## Info...



*All Bauhu steel framing is sourced and manufactured in the United Kingdom using premium grade, recycled steel.*

*Our walls are made in multiple layers of non-wood composite, insulation, air and moisture barriers and an EFIS façade system (External thermal insulation system)*

*The outer cladding protects not only against impact, but also provides fire resistance up to two hours. The EFIS wall cladding system meets the stringent international construction standard criteria for thermal insulation, impact resistance, air and water infiltration, and wind load resistance.*

*All of the building components are recyclable. Each complete building fits inside standard sized shipping containers and a home can be ready for delivery in as little as ten weeks.*

## *Standards & Codes of Practice*

- *International Building Code (IBC) 2015*
- *ASCE 7-16(22)- American Society of civil Engineers (Minimum Design loads for buildings & other structures)*
- *AISC 360-10 - American Institute of steel construction (Specification for structural steel buildings)*
- *AISI -100-16 - American Iron and Steel Institute (Design of Cold Formed steel & structural members)*
- *ASTM - American Society for Testing and materials.*
- *All CFS frame will be designed to AISI LRFD CFS design standard*

## *Cold Formed Steel (LGS)*

*EN10326:2004 S450GD+275g/sqm (Z600, 600g/sqm optional) self healing galvanisation. 450MPa (65 ksi.) This is within the range that is available (50 to 80 ksi).*

*Floor and roof joists are 100x41x16 typically at 600mm centers. External and main internal walls 150 x 65x1.6mm. Partition walls 70x41x1.2*

*LGS frames are fixed to each other and to the HRS members with specified mechanical fixings using pre-prepared punched holes to avoid any drilling on site. Cold rolled steel is formed from pre-galvanised steel coils into 'C' profiles which are then used to construct assembled frames which form walls, panels, trusses and joists dependent on individual building design.*

## *Hot Rolled Steel (HRS)*

*Material Availability of Hot Rolled Steel Sections is as per European/British sections with grade of S275*

*Plate thickness 6, 8, 10,12mm grade S275, S355. Galvanisation 275g/sqm (0.9oz/sqft)*

*HRS members are hot dip galvanised and fixed to each other with specified mechanical fixings to form a portal frame.*

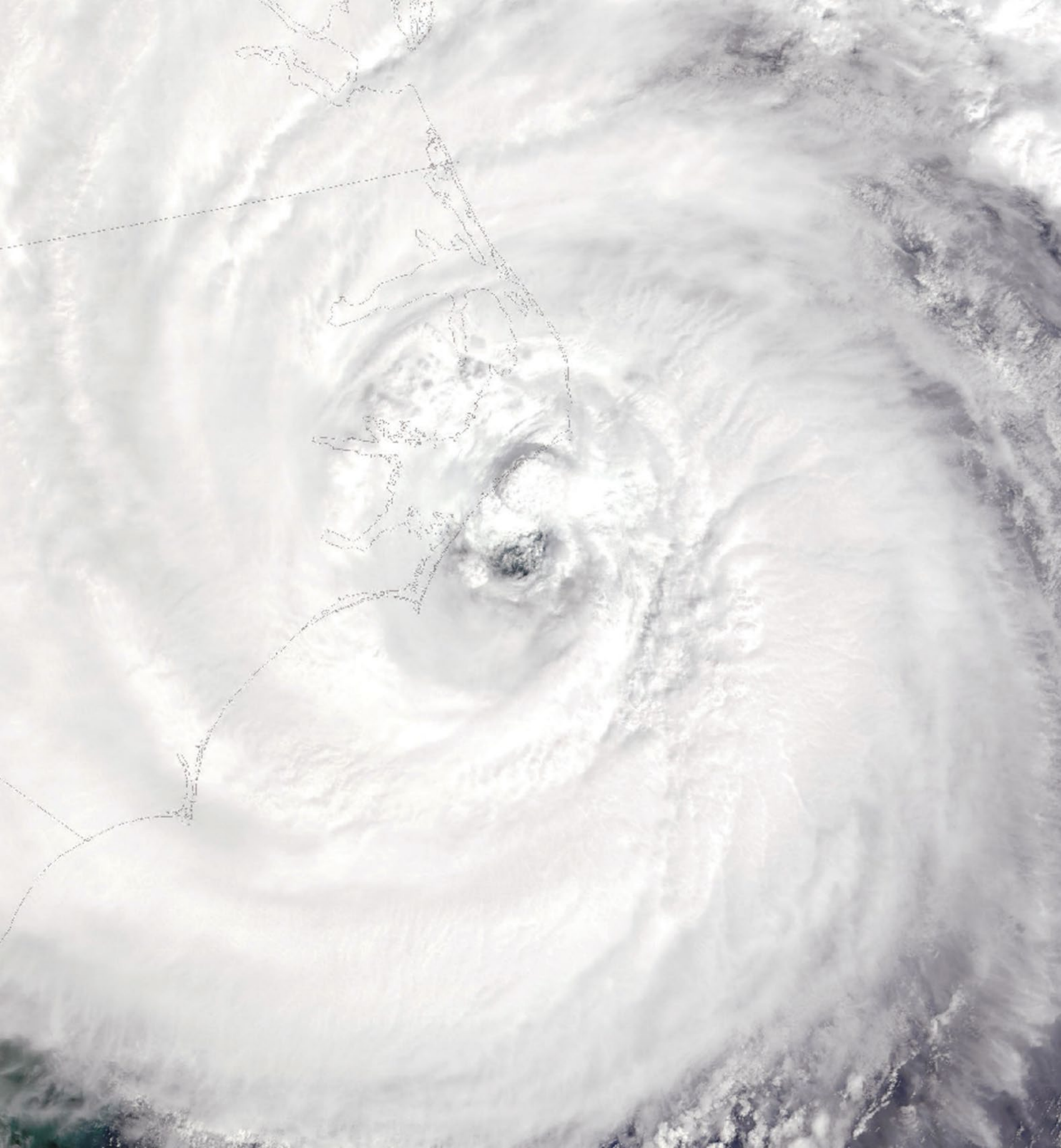
# Features

## At a glance...

*These homes are supplied as a complete kit ready for assembly on site and benefit from many key features and finishes*

- ✓ *Light steel frame roof structure*
- ✓ *Hurricane safe steel structure*
- ✓ *Thermal and acoustic insulated walls*
- ✓ *Low maintenance aluminium doors*
- ✓ *Double-glazed windows*
- ✓ *Impact resistant laminated glass*
- ✓ *Fiber cement / ETICs exterior siding*
- ✓ *Wall and ceiling paint finishes*
- ✓ *Natural stone style flooring*
- ✓ *White ceramic sanitary ware*
- ✓ *Polished chrome faucets*
- ✓ *Wall hung bathroom vanity units*
- ✓ *Shower closet wall tiling*
- ✓ *Base and wall kitchen cabinetry*
- ✓ *Composite panel interior doors*
- ✓ *Polished aluminium door furniture*





# *EIFS Facades*

## *Impact resistant façade systems*

*Hurricanes threaten The Caribbean and North America frequently, striking coastal areas. Numerous storms have endangered lives and left costly damage to the populated areas they hit.*

*Sto Hurricane Impact (HI) Systems provide exterior cladding solutions to protect against hurricane and tropical storm winds, water intrusion, and windborne debris.*

*All systems meet the stringent High Velocity Hurricane Zone (HVHZ) provisions of the Florida Building Code at specified design pressures. Sto Hurricane Impact Systems have Miami-Dade County Notice of Acceptance (NOA) and Florida statewide product approval.*

# *Insulated External wall systems*

*Bauhu homes employ a market-leading range of external wall insulation (EWI) systems to help reduce energy consumption and energy costs.*

*StoTherm Classic is a durable, functional and versatile choice for meeting and exceeding building insulation requirements.*

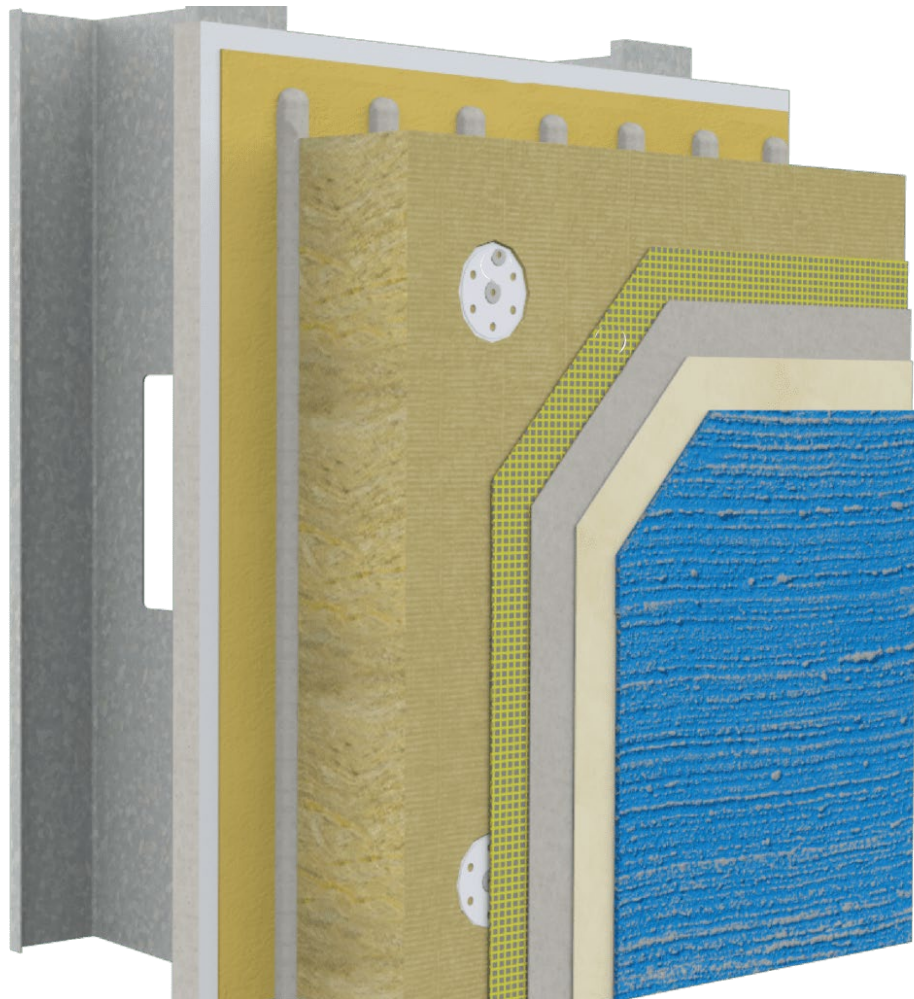
- ✓ *Entirely cement-free system*
- ✓ *Highly resistant to cracking.*
- ✓ *Up to 10 times more impact resistant than cementitious systems.*
- ✓ *Excellent mineral wool thermal insulation.*
- ✓ *Fire resistant*
- ✓ *Allows for the maximum use of internal space.*
- ✓ *Protects the external wall from weathering.*
- ✓ *Through colour tinting system*
- ✓ *Recyclable and environmentally responsible*
- ✓ *Lightweight system for easy installation.*



## *Info...*

*In a typical dwelling, around 30 % of the energy used to heat or cool a room is wasted due to poorly insulated walls. Sto external wall insulation systems dramatically cut energy loss by wrapping the building in a thermally resistant envelope, helping to reduce energy bills and CO2 emissions.*





- ✓ Substrate
- ✓ Adhesive coat
- ✓ Rockwool insulation
- ✓ Cement-free reinforcing coat
- ✓ Reinforcing mesh
- ✓ Decorative render finish

*Bauhu home designs supplied with an EIFS façade system are delivered together with all of the components and materials required to apply the façade system which is carried out on location after the building structure has been assembled.*

[Download a catalogue](#)

*Acrylic rendered facades provide an impact resistant, zero maintenance option creating a contemporary architectural style. Customers can choose from several external render grain sizes an extensive range of through tint finish colours.*



## *Info...*

*Approved for use in the High Velocity  
Hurricane Zone (HVHZ) in accordance with  
the Florida Building Code*

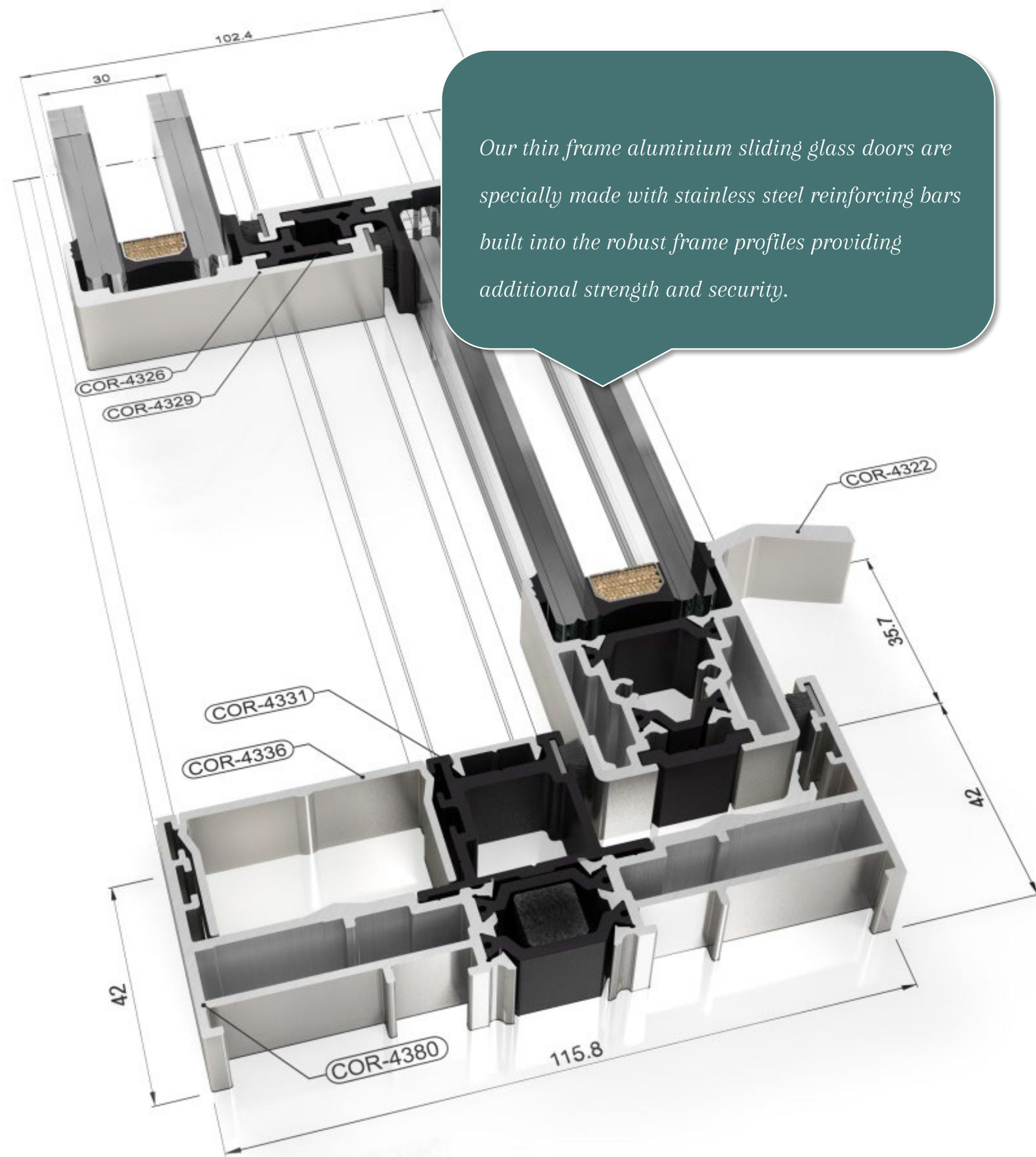


# *Roofing*

## *Bermuda Island Style*

*Designed and tested to perform in the harshest of weather conditions this range of homes has an attractive and sustainable elastomeric roof finish.*

- Highly reflective of solar gain*
- Easy to install and maintain*
- Approved for use in the High Velocity Hurricane Zone (HVHZ) in accordance with the Florida Building Code*
  - Fire rated and UV stable*

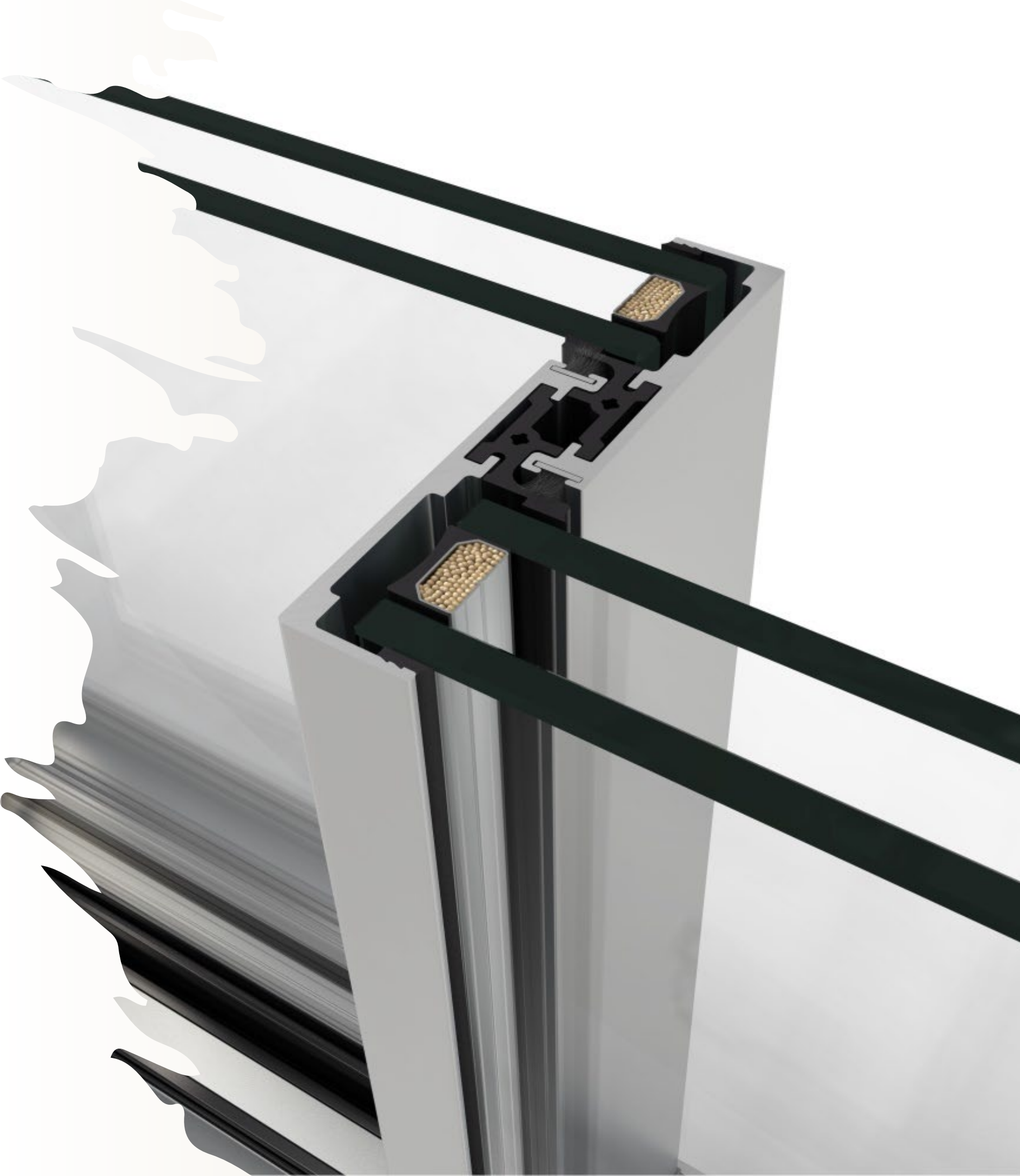


# Windows

## Sliding windows and doors

*Specially designed for use in high velocity wind regions our aluminium windows and sliding doors maximise light transmission whilst controlling solar gain. Robust frame profiles are reinforced with stainless steel bars and airtight, lockable sliding systems seal all openings.*

- ✓ Air permeability
- ✓ Water tightness
- ✓ Wind resistance
- ✓ Insulation
- ✓ Security



# *Glass*

*Impact resistant laminated glass*

*Advanced architectural glazing*

*Our laminated glass significantly improves a window's ability to withstand breakage, adds colour and sound control, provides optimum security and meets building codes in high velocity wind regions.*

- ✓ *4+2+4 Laminated outer glass layer for impact protection*
- ✓ *16mm argon filled inter pane cavity for maximum insulation*
- ✓ *6 mm SNX low E solar control glass interior pane for heat control.*

# Kitchen

*Customers can choose kitchen type, colour and style from our extensive catalogue (Example kitchen selection)*

*Choose your kitchen*

**nobilia**<sup>®</sup>



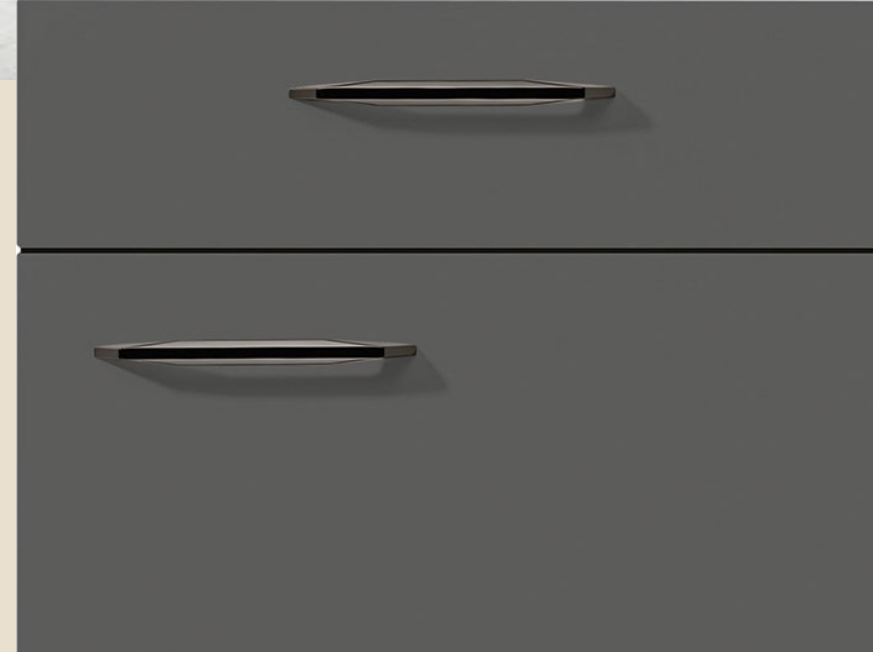
*Info...*  
*Kitchens are made to order. Customers can choose the kitchen style, cabinetry and worktop from an extensive range of designer kitchens.*



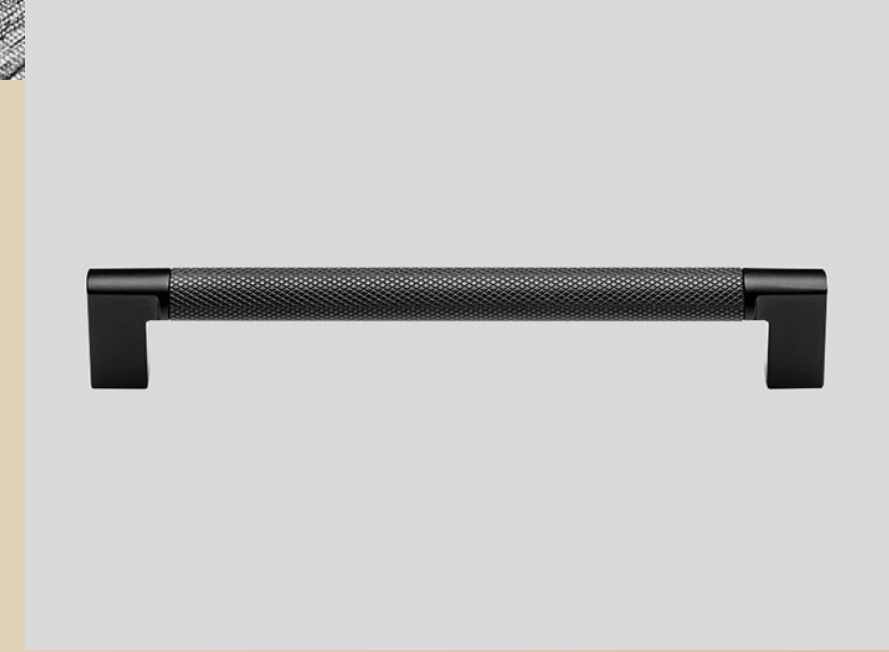
*Carcass 194*



*Worktop 205*



*Front 334*



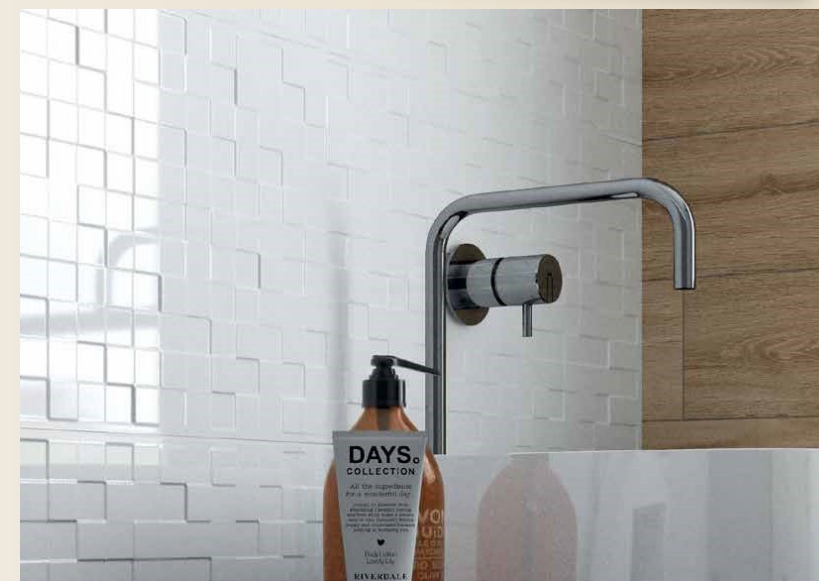
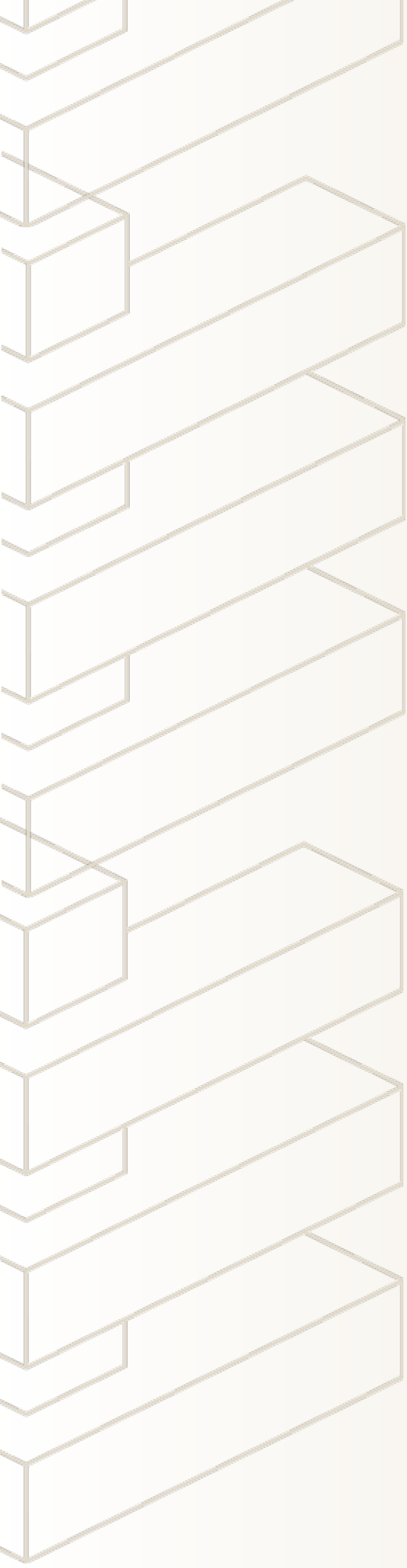
*Handle 502*

# *Ceramics*

*Bauhu homes are supplied with ceramic wall and floor finishes throughout. Our ceramic selection is provided by one of Portugal's leading tile manufacturers and customers can choose from an extensive range of products*

*Choose your ceramics*





## *Ceramics*

*Wall and floor finishes are supplied according to the Bauhu neutral ceramic selection with wood look and stone look tiles.*





# *Bathroom Furniture*



*Our wall hung bathroom vanities are finished in a high gloss lacquer with a composite countertop and fully integrated basin.*

**KITBANHO®**





# *Sanitary Ware*

*Our designers have carefully chosen a premium quality range of bathroom equipment, décor and finishes which are included with the home.*

- ✓ *Wall hung vanity cabinets*
- ✓ *Composite vanity countertop and deck mounted mixer faucets.*
  - ✓ *Wall mounted mirror with LED backlight*
  - ✓ *Polished chrome basin mixer faucets*
- ✓ *White ceramic toilet with dual flush and soft close seat.*
- ✓ *White slimline shower tray with glass enclosure*





# *Faucets*

## *Premium quality*

*Saving water is more than just a concern, it is an obligation.*

*All of our faucets are equipped with systems that save water by reducing the water flow by adding air to the water stream. While producing a soft touch and non-splashing sensation it offers the same feeling of comfort as a large flow but using much less water.*

*The BRUMA AirEcoDrop system saves 30% of water.*

*BRUMA chrome plating process follows a rigorous quality control procedure called Brightest. This process ensures an intense brightness and a lasting, resistant finish.*

*The exclusive BRUMA Smooth Breeze cartridge has high quality ceramic discs at its heart, which provide a unique feeling of smoothness and precision in controlling water flow and temperature regulation.*



 **BRUMA**  
FLOWINGART



# *Interior Doors*

*Hand made to order*



*Our contemporary interior doors are hand made and finished in a matt white lacquer with brushed metal door furniture.*

## *Info...*

*Steel is the only material that retains all its strength no matter how many times it is recycled. As a result, nearly 100% of all structural steel is recycled, making steel the only logical and responsible choice for sustainable construction.*

# *Sustainability*

## *The Earth we share...*

*Bauhu Homes are manufactured entirely from 100% recyclable materials and are designed to preserve the environment by providing exceptional thermal insulation performance, minimising running costs and reducing power consumption.*

## *Keeping it green...*

*Protecting our planet one home at a time with a responsible selection of materials and sustainable architectural design:*

- ✓ *Zero wastage*
- ✓ *Recyclable and recycled materials*
- ✓ *Exceptional thermal and acoustic insulation*
- ✓ *Double glazed windows*
- ✓ *Impact resistant windows and doors*
- ✓ *Bioclimatic design*
- ✓ *Zero structural timber*
- ✓ *Low VOC finishes*
- ✓ *Recycled plastics*
- ✓ *Rainwater recuperation*
- ✓ *Natural ventilation*
- ✓ *Low E solar control glazing*
- ✓ *Flat packed*
- ✓ *Inert fiber cement cladding*
- ✓ *Composite kitchen counter*
- ✓ *LED lighting (option)*
- ✓ *Composite panel interior doors*
- ✓ *Solar PV (option)*
- ✓ *Solar thermal water heating (option)*





### *Info...*

*The required United States standard for light gauge steel galvanizing is 0.6oz per square foot. Our steel frame is galvanized to 0.9oz per square foot significantly exceeding US standards.*

# *Durability*

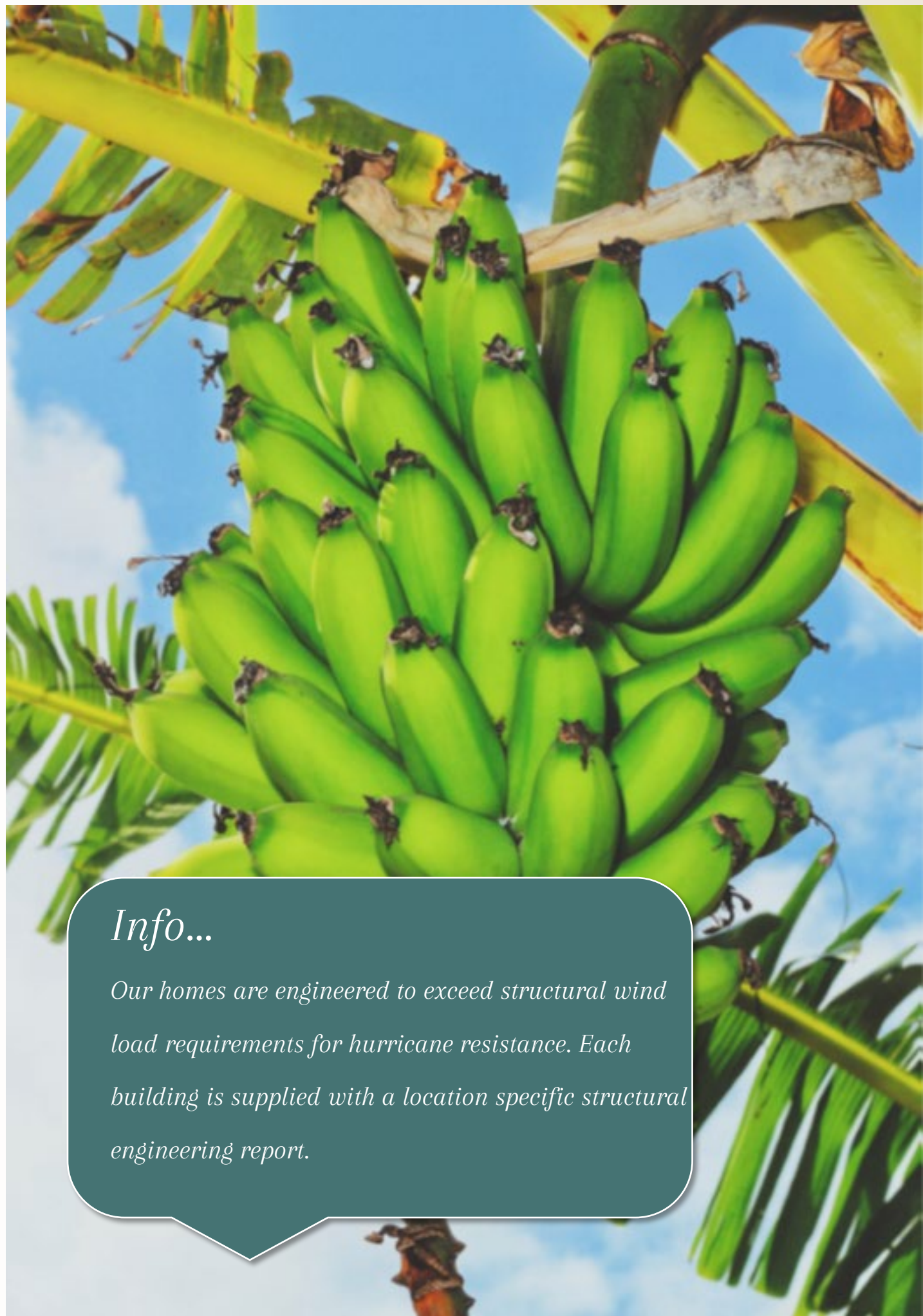
*Engineered to outperform...*



*A lightweight galvanized steel structure is used for external walls and internal partition walls (frames) according to structural calculations for the building type. These models incorporate a steel (HRS) structure which is hot dipped galvanized to eliminate corrosion in salty environments.*



*Our modular buildings are supplied in 'kit' format having been pre-assembled and checked prior to delivery. Each building is provided with an extensive 'step by step' assembly guide to ensure quick and simple erection on site.*



### *Info...*

*Our homes are engineered to exceed structural wind load requirements for hurricane resistance. Each building is supplied with a location specific structural engineering report.*

# *Climate Control*

## *The Caribbean...*

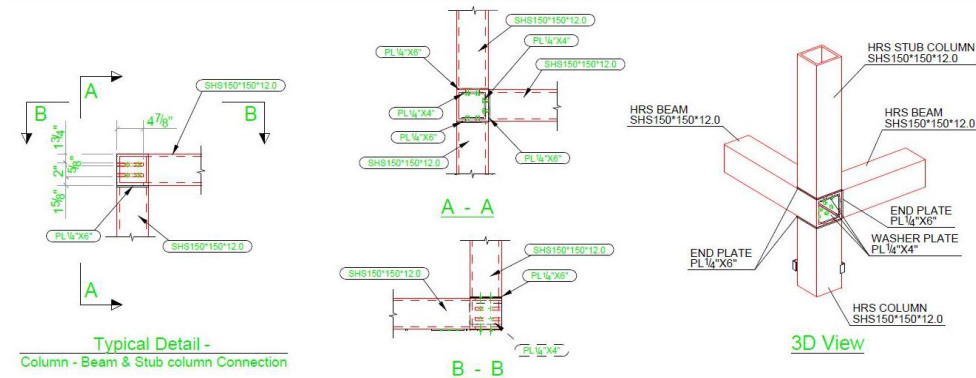
*Our complete range of homes are engineered for use in hurricane prone locations. They are made with a robust steel frame structure which is engineered according to the building code that applies in the build location.*

*For hurricane prone locations the modular construction system is designed for 200MPH wind loadings in full compliance with ASCE7-16(22) codes and based on the precise build location and terrain type.*

*Each Bauhu home is supplied with a full structural engineering report and detailed architectural and construction plans*

# Structural Engineering

Our hybrid steel frame modular construction system is designed for 200MPH wind loadings exceeding compliance with ASCE7-22 codes.



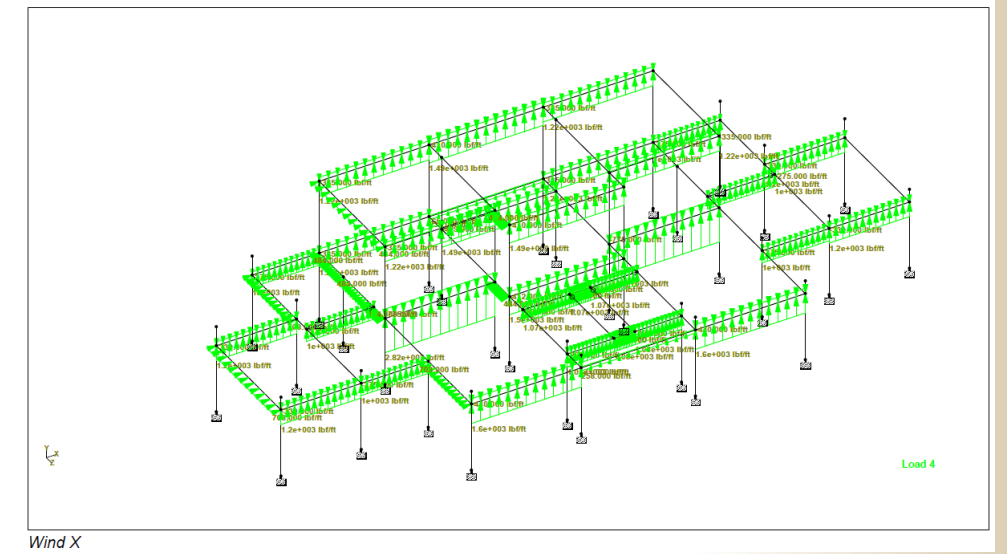
**TABLE 11.8-1 Site Coefficient  $F_{PGA}$**

Mapped Maximum Considered Geometric Mean ( $MCE_G$ ) Peak Ground Acceleration, PGA

Site Class	PGA $\leq 0.1$	PGA = 0.2	PGA = 0.3	PGA = 0.4	PGA = 0.5	PGA $\geq 0.6$
A	0.8	0.8	0.8	0.8	0.8	0.8
B	0.9	0.9	0.9	0.9	0.9	0.9
C	1.3	1.2	1.2	1.2	1.2	1.2
D	1.6	1.4	1.3	1.2	1.1	1.1
E	2.4	1.9	1.6	1.4	1.2	1.1

See Section 11.4.8

Note: Use straight-line interpolation for intermediate values of PGA.



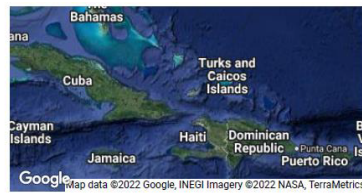
Wind X

4/22/22, 4:51 PM  
**ATC Hazards by Location**

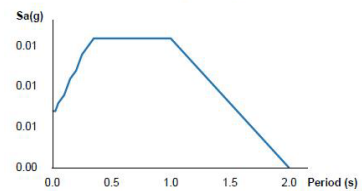
**Search Information**

Address: bahamas  
Coordinates: 25.03428, -77.39627999999999  
Elevation: 29 ft  
Timestamp: 2022-04-22T11:20:18.730Z  
Hazard Type: Seismic  
Reference Document: ASCE7-10  
Risk Category: IV  
Site Class: D

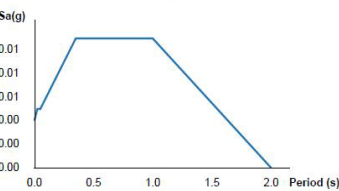
ATC Hazards by Location



**MCE Horizontal Response Spectrum**



**Design Horizontal Response Spectrum**

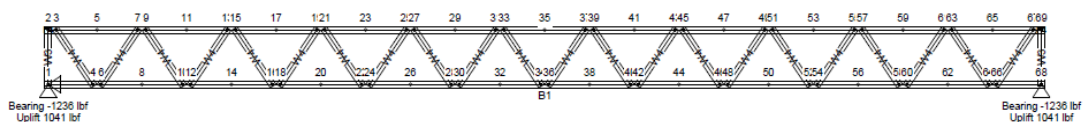


**Basic Parameters**

Name	Value	Description
S <sub>S</sub>	0.01	MCE <sub>R</sub> ground motion (period=0.2s)
S <sub>1</sub>	0.012	MCE <sub>R</sub> ground motion (period=1.0s)
S <sub>M5</sub>	0.016	Site-modified spectral acceleration value
S <sub>M1</sub>	0.028	Site-modified spectral acceleration value
S <sub>D5</sub>	0.011	Numeric seismic design value at 0.2s SA
S <sub>D1</sub>	0.019	Numeric seismic design value at 1.0s SA

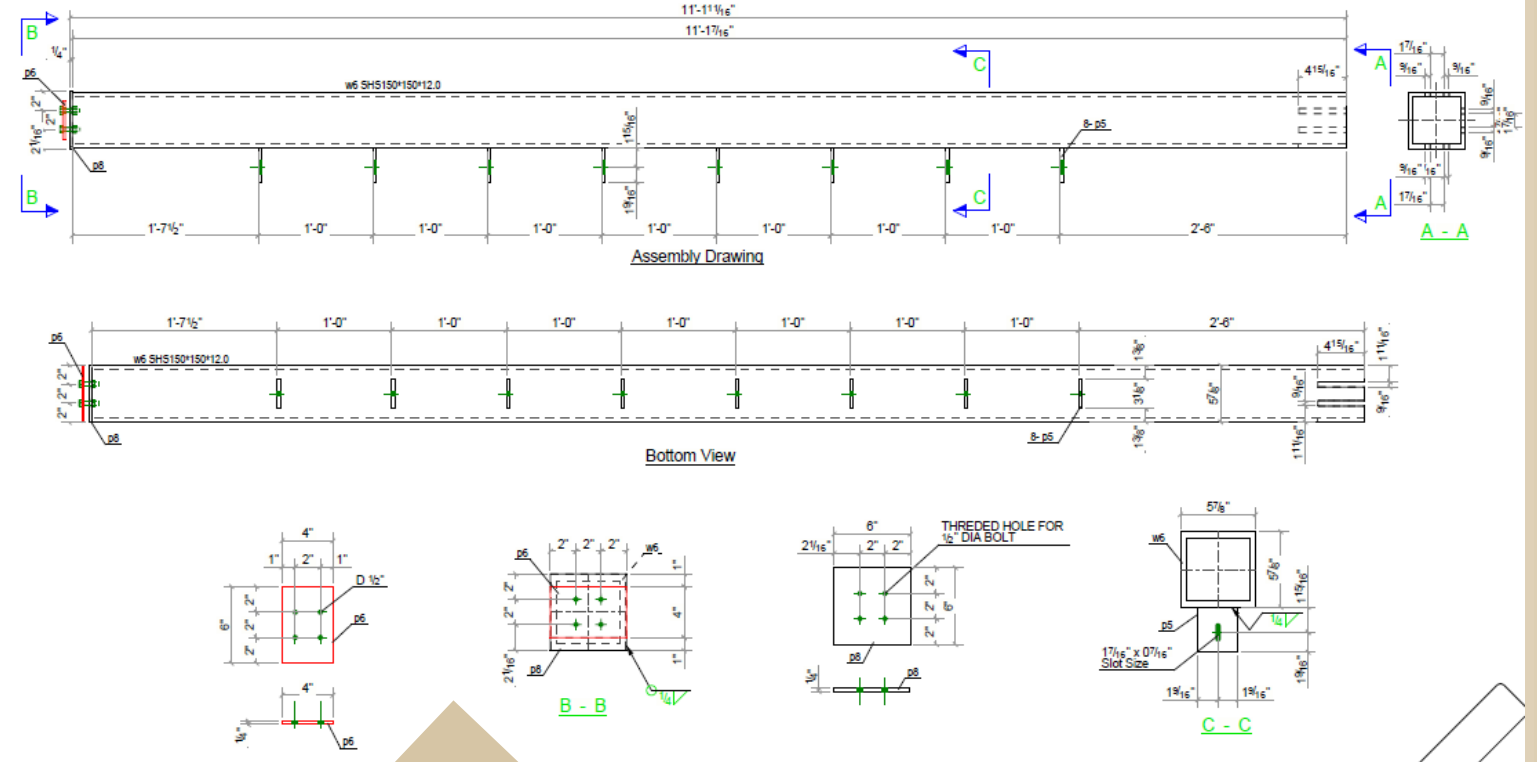
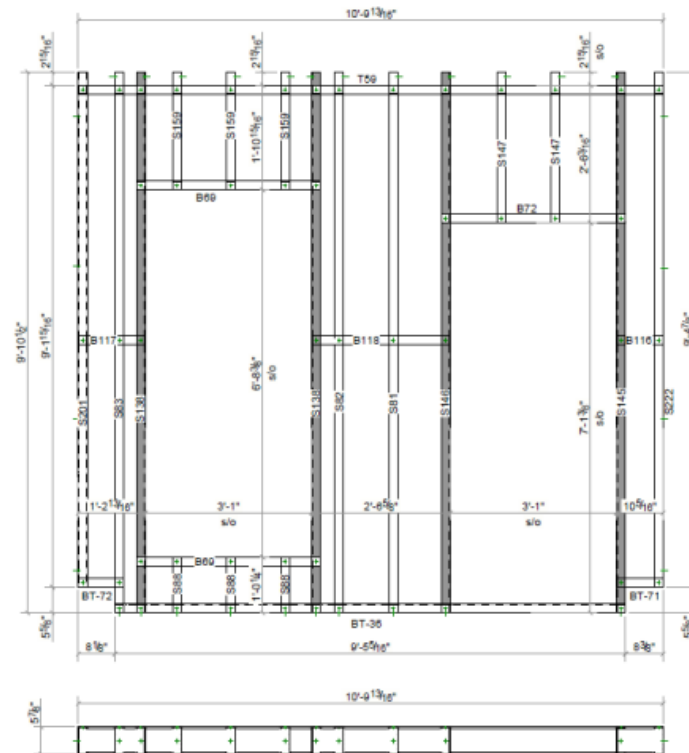
**Additional Information**

Name	Value	Description
SDC	A	Seismic design category
F <sub>a</sub>	1.6	Site amplification factor at 0.2s
F <sub>v</sub>	2.4	Site amplification factor at 1.0s



Quantity Required = 1 Mark as RJ1 Engineering Status = Passed  
Minimum number of fasteners required is 2 per joint

LOADS & DESIGN FACTORS	DESIGN LOADING		PARAMETERS		BRACING		MAXIMUM MEMBER AXIAL FORCES AND CRITICAL STRUCTURAL DESIGN INDEX	
	Factor	Value	Type	Name	Member	Force	Design Index	
Terrain Factor (Z)	1.00	1.00	Wind	FRAMED/CD 10g-10min-X(2) (S1, 2)	BT-72	20.84	1.00	
Importance Factor (I)	1.50	1.50	Roof Live	FRAMED/CD 10g-10min-Pathway(S1) Refer DWG	BT-72	20.84	1.00	
Topographic Factor (K <sub>t</sub> )	1.00	1.00	Concentrated Live	FRAMED/CD 10g-10min-Pathway(S1) Refer DWG	BT-72	20.84	1.00	
Wind Speed (V)	160	160	Wind Up	FRAMED/CD 10g-10min-Pathway(S1) Refer DWG	BT-72	20.84	1.00	
Wind Pressure (P)	16.0	16.0	Wind Down	FRAMED/CD 10g-10min-Pathway(S1) Refer DWG	BT-72	20.84	1.00	
Wp Bottom Chord	0.9	0.9	Wp Top Chord	0.9	0.9			
Wp Bottom Chord	0.9	0.9	Wp Bottom Chord	0.9	0.9			
Wp Top Chord	0.9	0.9	Wp Top Chord	0.9	0.9			
Wp Bottom Chord	0.9	0.9	Wp Bottom Chord	0.9	0.9			
Wp Top Chord	0.9	0.9	Wp Top Chord	0.9	0.9			





# Warranty

Our strict factory-based quality control ensures that completed buildings are thoroughly inspected prior to delivery. Nevertheless, our buildings are fully guaranteed for two years in the case of manufacturing defects. Third party supplier's component failure varies from two to thirty years. Detailed limited warranty terms are available on request.

# Compliance



*OECS building Code compliant*



*Building analysis and design for structural steel*



*Design loads criteria for wind loadings ASCE7 - 16*



INTERNATIONAL  
BUILDING  
CODE®

*International building code compliant*

*Approved by the  
Bahamas Ministry of Public Works*

# *Small print*

*Due to fluctuation in raw material costs prices are intended as a guide only.*

*All prices are based on USD ex works.*

*VAT if applicable is excluded*

*Shipping and delivery are excluded*

*Assembly and contractor works are excluded*

*Free standing furniture items are excluded*

*Appliances and electrical materials are excluded*

*A detailed scope of supply is provided with contracts*

*We would be pleased to provide shipping costs and estimates for on site assembly works dependent on the choice of home and your location.*

## BAUHU

*Email: [contact@bauhu.com](mailto:contact@bauhu.com)*

*Website: <https://bauhu.com>*

*Telephone: (+44) 7949 345 478*

*\*This brochure is non contractual - free standing furniture shown is excluded*

