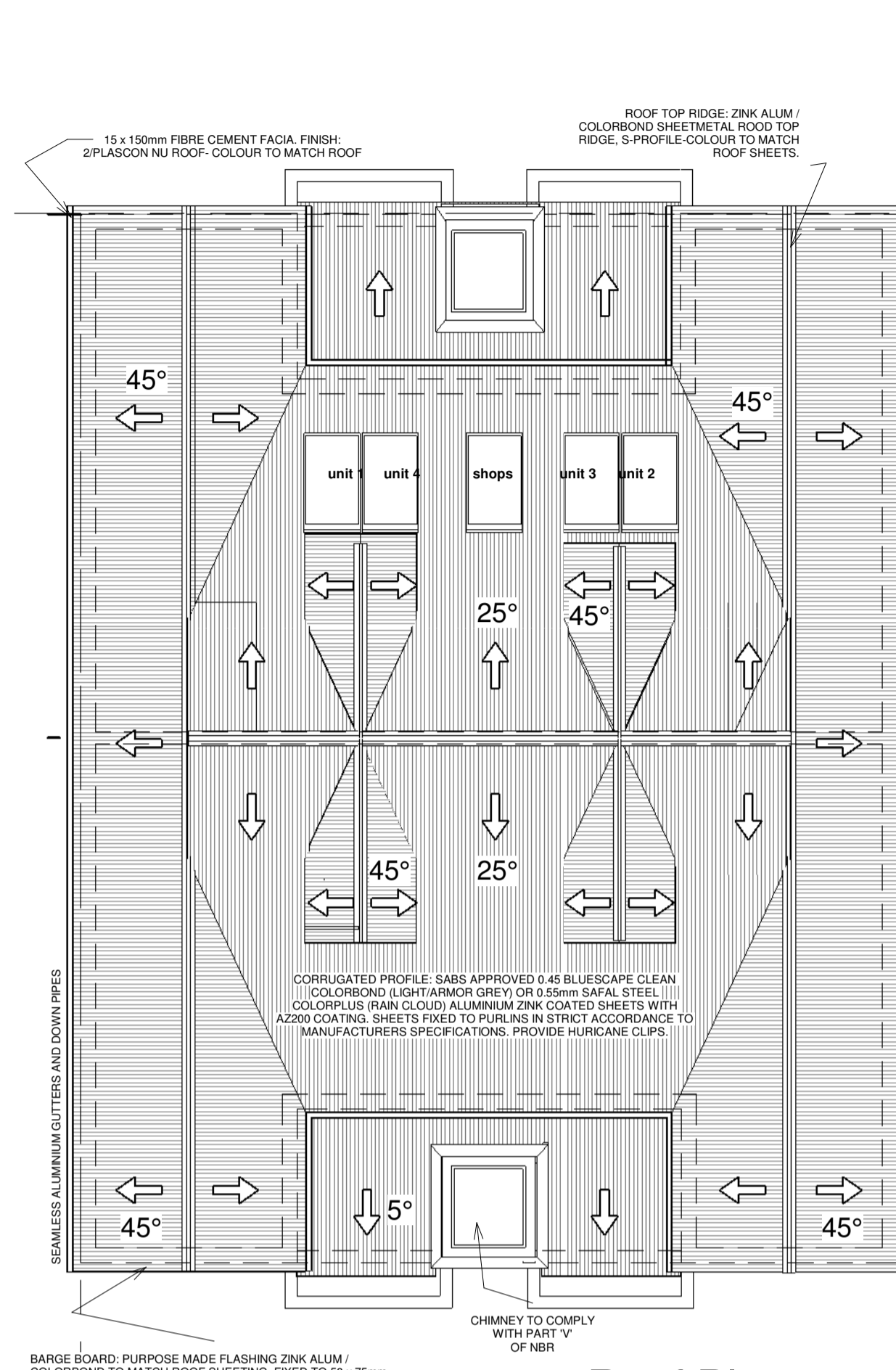


201-First Floor
1 : 50



202-Roof Plan
1 : 100

ESTIMATED ENERGY CONSUMPTION PER UNIT				
LEGEND	TYPE	WATT	AMOUNT	TOTAL WATT
●	LED DOWN LIGHTER	4 Watt	17	68W
○	LED TUBE LIGHT	18 Watt	4	72W
⊕	LED PENDANT LIGHT	18 Watt	4	72W
▲	LED INTERIOR WALL MOUNTED LIGHT	11 Watt	2	22W
▲	LED EXTERIOR WALL MOUNTED LIGHT	11 Watt	2	22W
⚡	WALL MOUNTED BRAAI LIGHT	60 Watt	1	60W
TOTAL PER UNIT				316 Watt

UNIT 1=69m² Watt/m² Permitted (5Watt/m²)	UNIT 2=69m² Watt/m² Permitted (5Watt/m²)	UNIT 3=67m² Watt/m² Permitted (5Watt/m²)	UNIT 4=67m² Watt/m² Permitted (5Watt/m²)
Permissible: 345Watt	Permissible: 345Watt	Permissible: 335Watt	Permissible: 335Watt
4.5Watt/m²	4.5Watt/m²	4.7Watt/m²	4.7Watt/m²

ASSUME LIGHTS ARE ON FROM 17:00 - 22:00 EACH DAY/YEAR (5h/DAY)
52(WEEKS) X 7(DAYS) X 5(h) = 1820.h.a
0.336 x 1820h.a = 611.52Wh.a

CONCLUSION:
THE DESIGN COMPLIES WITH THE REQUIREMENT OF SANS 10400-XA:2011 FOR ENERGY CONSUMPTION

ESTIMATED ENERGY CONSUMPTION PER TYPE 1 AND 4				
LEGEND	TYPE	WATT	AMOUNT	TOTAL WATT
●	LED DOWN LIGHTER	4 Watt	7	28W
○	LED TUBE LIGHT	18 Watt	7	126W
▲	LED EXTERIOR WALL MOUNTED LIGHT	11 Watt	29	319W
◀	LED LANDSCAPING LIGHT	4 Watt	9	36W
SHOP ARE: 55m²				TOTAL PER SHOP TYPE 1 & 4: 638 Watt

ESTIMATED ENERGY CONSUMPTION PER TYPE 1 AND 4				
LEGEND	TYPE	WATT	AMOUNT	TOTAL WATT
●	LED DOWN LIGHTER	4 Watt	10	40W
○	LED TUBE LIGHT	18 Watt	10	180W
SHOP ARE: 48m²				TOTAL PER SHOP TYPE 2 & 3: 580 Watt

SHOP 1=55m² Watt/m² Permitted (20Watt/m²)	SHOP 2=49m² Watt/m² Permitted (20Watt/m²)	SHOP 3=49m² Watt/m² Permitted (20Watt/m²)	SHOP 4=55m² Watt/m² Permitted (20Watt/m²)
Permissible: 1200Watt	Permissible: 980Watt	Permissible: 980Watt	Permissible: 1200Watt
11.6Watt/m²	13Watt/m²	13Watt/m²	11.6Watt/m²

ASSUME LIGHTS ARE ON FROM 08:00 - 17:00 EACH DAY/YEAR (12h/DAY)
52(WEEKS) X 7(DAYS) X 5(h) = 1820.h.a
0.638 x 4368h.a = 2786.7Wh.a 0.580 x 4368h.a = 2533.4Wh.a

CONCLUSION:
THE DESIGN COMPLIES WITH THE REQUIREMENT OF SANS 10400-XA:2011 FOR ENERGY CONSUMPTION

CONCLUSION:
THE DESIGN COMPLIES WITH THE REQUIREMENT OF SANS 10400-XA:2011 FOR ENERGY CONSUMPTION

NOTE: FITTING DOES NOT CHANGE.

ELECTRICAL LEGEND			
SWITCHES			
●	LIGHT SWITCH	2	TWO WAY LIGHT SWITCH
3	THREE WAY LIGHT SWITCH	D	DIMMER SWITCH
DN	DAY NIGHT SWITCH	◻	DISTRIBUTION BOARD

PLUGS			
▶	DOUBLE SOCKET @300 above ffl unless specified otherwise.		
▶	SINGLE SOCKET @300 above ffl unless specified otherwise.		
▶ E	EXTERNAL SOCKET	▶ C	CEILING MOUNTED SOCKET
SP	SHAVING POINT	▶	PROVISIONAL ELECTRICAL POINT
S	STOVE		

COMMUNICATION & ENTERTAINMENT			
▶ T	DATA / TELKOM	▶	INTERCOM
▶ TV	T.V POINT	▶	DOOR BELL
▶	SATELLITE DISH POINT		

HOT WATER SYSTEM AND HEATING			
▶	GEYSER GEYSER INSULATION ACC TO SANS 10254	▶	GAS GEYSER
▶	HEAT PUMP	▶	UNDER FLOOR HEATING

VENTILATION AND COOLING SYSTEM			
▶	AIR CONDITION EXTERNAL UNIT	▶	AIR CONDITION EXTERNAL UNIT
▶	EXTRACTOR FAN	▶	EXTRACTOR FAN HOOD
▶	CEILING FAN		

BUILDING DETAILS
AS PER SANS 10400 & SANS 204

Occupancy	H3 & F2	Dwelling House & Small Shop
Climate	4	Cape, Aghulas
Orientation	North	

Net Ground Floor Shop Type 1 & 4:	49m²
Net Ground Floor Shop Type 2 & 3:	46m²
Net First Floor Apartment Type 1 & 2:	48m²
Net First Floor Apartment Type 3 & 4:	45m²

AREA SCHEDULE		
Ground Floor Building Area	+ Ground Covered Area	= Total Ground Floor Building Area
224m²	60m²	284m²
First Floor Building Area	Covered Balcony Area	Total First Floor Building Area
246m²	+ 38m²	= 284m²
Total Building Area	Total Covered Areas	Grand Total Building Area
470m²	+ 98m²	= 568m²

Site	764m²
Used Coverage area	284m²
Used coverage Percentage	37.1%
Used FAR Area	461m²
Used FAR Ratio	0.6

ESTIMATED ENERGY REMAINDER OF BUILDING

LEGEND	TYPE	WATT	AMOUNT	TOTAL WATT
●	LED DOWN LIGHTER	4 Watt	7	28W
○	LED TUBE LIGHT	18 Watt	7	126W
▲	LED EXTERIOR WALL MOUNTED LIGHT	11 Watt	29	319W
◀	LED LANDSCAPING LIGHT	4 Watt	9	36W
TOTAL				455 Watt

REMAINDER BUILDING AREA: 87m²	Watt/m² Permitted = (20Watt/m²)	5.2Watt/m²
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ESTIMATED MAXIMUM ENERGY DEMAND AS PER SANS 10420:
20 W/m² x 87m² = 1740W = PERMISSIBLE 20kW/m².a x 77m² = 1.740 kW.a [a=1/year]

ESTIMATE ANNUAL ENERGY CONSUMPTION
ASSUME LIGHTS ARE ON FROM 08:00 - 17:00 EACH DAY/YEAR (12h/DAY)
52(WEEKS) X 7(DAYS) X 5(h) = 1820.h.a
LIGHTS = 1056 OR 1.056 kW
0.45kW x 4368h.a = 1965kWh.a

CONCLUSION:
THE DESIGN COMPLIES WITH THE REQUIREMENT OF SANS 10400-XA:2011 FOR ENERGY CONSUMPTION

NOTE: FITTING DOES NOT CHANGE.

Note:
1. The design on this drawing is copyright and remains the property of Urban Concept Architects CK 2005-005530-23.
2. All work to be carried out in strict accordance with local authority requirements, National Building Regulations and SANS Standards. This drawing may not be scaled. Only figured dimensions and levels may be used.
3. All relevant details, levels and dimensions must be checked on site before commencement of work. Any discrepancies to be reported to the architect's office immediately.

No.	Description	Date

- ◻ SEWER CONNECTION
- ◻ WATER NETWORK CONNECTION
- ◻ ELECTRICAL CONNECTION
- ◻ NATURAL GAS CONNECTION
- ◻ LIGHT BULLARD/ STREET LIGHT
- ◻ GROUND WORK TO BE CUT

Paul Boshoff
6576

Client: **Template Absolute Marine Adventures**
Address: **ERF 369 HOOF STRAAT STRUISBAAI**

DRAWING:

FIRST FLOOR

1521
2018/06/28 11:51:34 AM

Author

Drawing Number Scale:

101 As indicated

