

Constraint LOOR FACTOR MAXIMUM HEIGHT ABOV BASE LEVEL STREET BOUNDARY BUILDING LINE COMMON BOUNDARY BUILDING LINE WINDOWS & DOORS PARKING COVERAGE

Scale 1:100

Reinforcing to concrete foundations as per Str. Eng. specifications. All concrete to

Isoboard insulation on 250micron DPM on well compacted sand fill, compacted in

layers not exceeding 150mm. DPC weepholes to be minimum 150mm above the finished ground level all around. All to str. eng's specifications & inspections.

External: 280mm & 230mm NFB SABS approved MAXI brick, smooth plastered &

plastered & painted. Internal window cills to be plastered and painted.

Internal window cills to be plastered & painted, 375micron under all cills.

Control and articulation joints to engineer's specifications.

opening. vertical dpc to all windows & external doors.

Lintols laid in accordance with manufacturer's specification.

painted, colour to client's approval. Internal: 110mm NFB SABS approved solid ROK clay brick, smooth steel trowel finish

Galvanized brickforce to all walls every four brick courses and to every course to

foundations plinth walls and to every course above pre-stressed concrete lintol

opening to be laid to manufacturer's specifications and have a minimum bearing

of 250mm for spans up to 2.5m & 350mm for spans greater than or equal to 2.5m

All beams/lintols over opening exceeding 1000mm to Structural Engineer's detail.

P.C lintols & 4 courses brickwork with brick-force every course over all openings not

Rafters tied down to walls with 1.2mmx30mm GMS hoop iron straps embedded into

9mm rhino board ceilings fixed to 38x38mm Grade 7 SABS approved SA Pine

brandering at max. 400,, centres. Apply double fibretape over butt joints and skimmed with cretestone and painted. Apply min. 2x coats of 'grippon'.

All windows and doors in brickwork to have full vertical and horizontal DPC

External doors and windows: epoxy coated aluminium internal timber doors. Codes

Glazing: clear glazing to all windows to comply with SANS 10400 Part N & S 10137.

Glazing below 500mm from floor level, access doors or larger than 1 m<sup>2</sup> to be safety

All external doors and windows to be powder-coated aluminium

All internal doors to be timber to separate schedule

All glazing to comply with SANS 10400 Part N

height all around. Pre-stressed concrete lintols above all windows, doors and

375micron DPC under all cavity walls, above all windows, doors & external

foundations, floor slabs & beams to be ready-mixed type, strength to Str. eng. specifications. Articulation joints to Str. eng's specifications.

To comply with SANS 10400 Part J and Parts B and H. Floor finish on minimum 50mm cement screed on 170mm RC slab on 30mm

SPECIFICATIONS

FOUNDATIONS

WALLS

OPENINGS

SKIRTINGS

ROOFS

TYPE A

wall.

CEILINGS

10400 - B.

exceeding 3.0m

To be selected by client

TYPE A - MAIN HOUSE

TYING OF ROOF

o comply with SANS 10400 Part I

To comply with SANS 10400 Part I

Cornices to be selected by client

See window calculation schedule

To comply with SANS 10400 Parts N & O

Min. 10% of floor area glazed

Min. 5% of floor area for ventilation

LIGHTING AND VENTILATION

refer to separate door schedule.

All habitable rooms to have:

WINDOWS AND DOORS

Waterproofed RC slab to str. eng's details.

Min combined roof and ceiling assembly R-Value: 3.7

FLOOR CONSTRUCTION

RC beams to engineer's detail.

All foundations to comply with SANS 10400 Part H.

To comply with SANS 10400 Part K and Part B

Excavations to comply with SANS 10400 Part G. 700x250mm concrete foundations to 280/250/230mm wall.

500x300mm concrete foundations to internal 115mm walls.

PUBLIC SAFETY To comply with SANS 10400 Part D & B

# BALUSTRADES

1.0m high MS balustrade per N.B.R, max 100mm spacings between balusters The balustrades are a design and supply contract, and the subcontractor must provide a professional engineers certificate on completion. All shop drawings submitted for approval, need to be first signed off by the subcontractors professional engineer prior to submittal.

STAIRS & STEPS To comply with SANS 10400 Part M.

#### Min. 250mm treads Max. 200mm high risers

WATERPROOFING

#### To comply with SANS 10400 Part L. STORMWATER

To comply with SANS 10400 Part R.

## **RAINWATER GOODS**

100mm seamless aluminium box gutters on 225x12mm fibre cement fascia. PVC downpipes to discharge into catchpits and out to the street.

### PAINTING

All material finishes & colours to be in strict accordance with estate approved specifications

#### ENERGY EFFICIENCY REGULATIONS FLOORS:

Isoboard insulation under concrete slab min. R-Value of 1,0 Isoboard insulation around vertical edge perimeter of slab continuous from the finished ground level for the full depth of the vertical edge of concrete slab-on-ground min. R-Value of

#### EXTERNAL WALLS 50mm cavity walls with R-value exceeding 0.35

FENESTRATION To be in accordance with SANS 204 as per table to meet the

minimum energy performance requirements. ROOF ASSEMBLY

#### Min Total R-Value require = 3.7 Roof insulations as per SANS 204

Part XA calculations: R-Value 0.05 Ceiling

Ceiling insulation - Radientshield R-value=1.36 Isotherm R-value = 2.3

# Lambda R-value = 1.0

Roof cover Total combined

## HOT WATER SUPPLY

All exposed hot water service pipes to and from hot water cylinders to be insulated with a min. R-Value of: 1 for pipes with a diameter of ≤80mm of 1.5 for pipes with a

R-Value 4.66

R-Value 0.35 R-Value 5.06

diameter of more than 80mm. 15mm wall thickness for pipes smaller than 25mm Ø and 25mm wall thickness for pipes bigger than 25mm Ø Hot water pipes to be insulated with Thermoflex Thermal insulation to be installed in accordance with the manufacturer's instructions and be protected against the effects of weather, sunlight & be able to withstand the temperatures within the pipina. Hot water vessels and tanks shall be insulated with a material achieving a min. R-Value of 2,0. Insulation on vessels, tanks and piping containing cooling water shall be protected by a vapour barrier on the outside of

the insulation. Pipes laid under walls or under surface slabs where any portion of a pipe passes under a building or slab, the following shall apply: a. such portion shall be installed inside a sleeve of internal

- diameter of at least 15mm plus the outside nominal diameter of such pipe; b. such portion shall be protected against the transmission
- of any load to it: c. such portion shall be laid without any change of
- direction, without any junctions; and d. the trench win which such portion is laid shall in no way impair the stability of any building, or interfere with, or
- affect any existing services.

#### DRAINAGE & PLUMBING To comply with SANS 10400 Part P

50mm Ø PVC waste pipes, 110mm diameter PVC sewer soil & ent pipes . I.E's to all bends & junction covers at ground level

All waste pipe to be fully accessible. Access covers to all ducts. Stainless steel covers to shower drains. All sanitary fittings to be connected separately. Drainage within driveways or under buildings or walls to be adequately protected. Any foundation within 1500mm of drain must be below the level of same drain line. Hot water cylinder = min. 2001 400kpa solar panel geyser Min 50% of energy used in building to be renewable. RE's or it's at all bends and junctions with marked covers at ground level.

Reseal all traps to waste fittings.All waste pipes to be easily accessible for repair and cleaning. Closed system enter at 45° junctions. Access panels to sewer ducts to comply with part

pp.20.2.(a).(ii) of SANS10400600mm bends to drainage run.

MIN. depth 400mm above boundary i.c any drainage falling near to foundations or under driveways, be 102Ø pentapipe protected, in accordance with part p24

## the NBR SANS10400.

75x51 PVC downpipes and 102Ø pipes and sumps to road. Paved areas to be graded to the on site storm water system. backwash to sewer system Stormwater to be taken to road via surface channels.

Allow for the installation of 3 garden taps - positions to be confirmed on site. Supply 20Ø water connection

Supply 25Ø pipe with draw wire from dwelling to front boundary

CALCULATIONS FOR GUIDELINE COMPLIANCE

# AREAS SUMMARY SITE

First storey	=	108.50m <sup>2</sup>
First storey terraces	=	31.61m²
Second storey	=	108.50m <sup>2</sup>
Second storey terraces	=	31.61m²
Third storey	=	117.76m <sup>2</sup>
Third storey terraces	=	22.69m <sup>2</sup>
Fourth storey	=	117.76m <sup>2</sup>
ERF AREA	=	331m²

# COMPLIANCE WITH THE CITY OF CAPE TOWN ZONING SCHEME

CURRENT ZONING: GENERAL RESIDENTIAL 4 (GR4)

	Allowable	Achieved	Compliance
	1.5	New TOTAL floor area: 470 sq.m. Erf size: 331 sq.m. Allowable Floor Factor = 497sq.m.	COMPLIANT
VE	24m 0.6H / 15m within 18m from street boundary	Top of Parapet: 15m	COMPLIANT
	4.5 m	4.5m	COMPLIANT
	0m for first 18m perp. from street boundary line with max height 15m	0m and 1.5m on common boundary until 18m thereafter 4,5m	COMPLIANT
	1,5m from all common boundaries	Min. 1,5m from all common boundaries	COMPLIANT
	PT1 AREA APPLIES 1.25 BAYS PER UNIT	9 BAYS (incl. 2x VISITORS BAYS) 6 UNITS - 8 BAYS REQUIRED	COMPLIANT
	60%	FOOTPRINT = m <sup>2</sup> = %	COMPLIANT

# TOTAL NUMBER OF FLATS: 6 UNITS

SEE POA

SIGNATURE

The design on this drawing is copyright and remains the property of eternity services. All work to be carried out strictly in accordance with municipal regulations. Figured dimensions to be taken in preference to scaling drawing. The contractor and his sub-contractors must check all relevant details and dimensions before commencing work on site or manufacture of components. Any discrepancies must be reported to the eternity services immediately.

VER DATE DESCRIPTION



# **ETERNITY SERVICES**

+27 074 418 7577 ETERNITY SERVICES (PTY) LTD TEL FAX +27 086 950 9790 EMAIL

REG 2012/16618/07 admin@eternityservices.co.za

PROJECT TITLE:

CLIENT:

ON ERF:

EXISTING PROPERTY

PROPOSED FLATS ON

45532 8 NURSERY ROAD Rondebosch

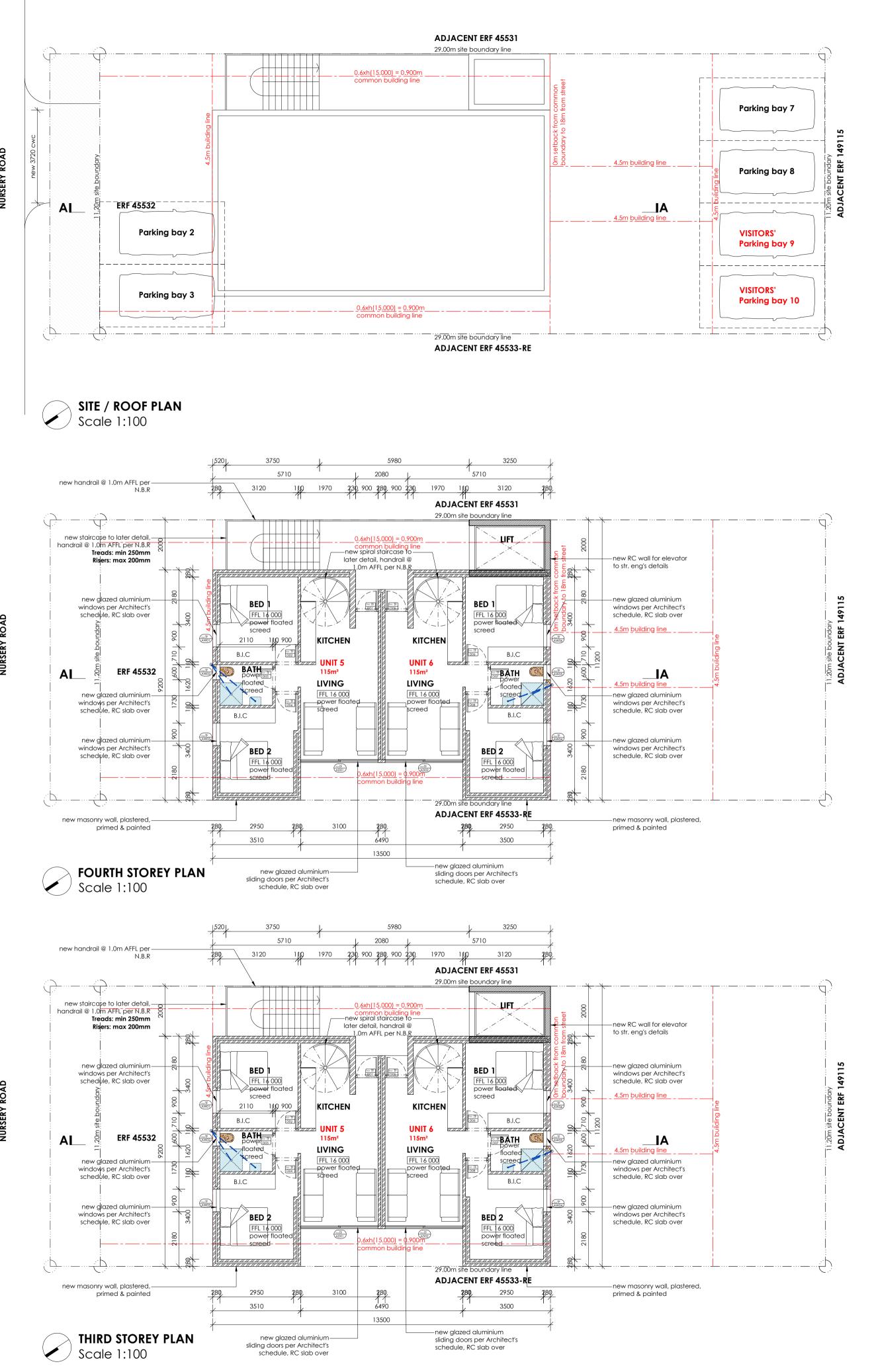
# DRAWING TITLE: PLANS

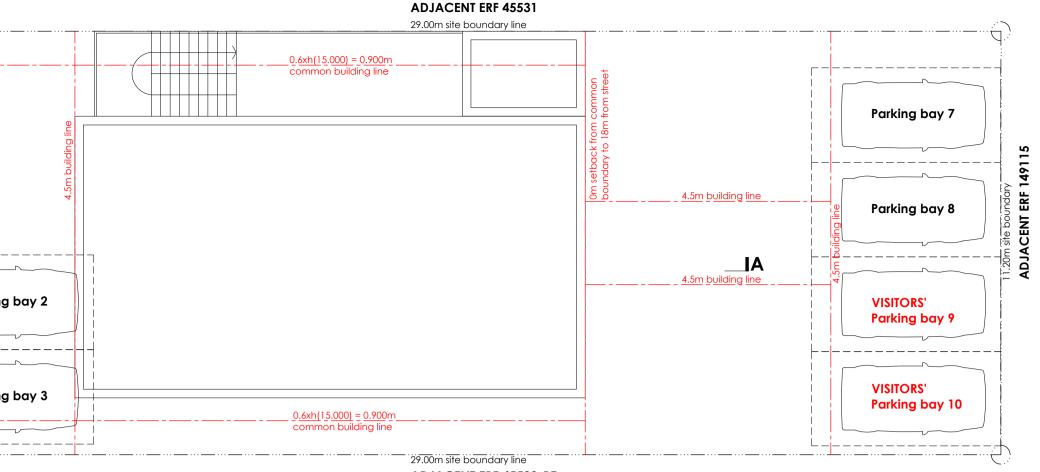
scale:	1:100 A1 size	<b>DATE :</b> DRAWN by:	OCT E.A-P	2019 AT34897891
PROJECT No.		DRWG No.		VER:
2019/700		NSY SC 10	01	0

CLIENT/CLENT REPRESENTATIVE

ARCHITECT PAT3489789 SIGNATURE

Frames to receive glazing material to comply with SANS 727 or SANS 1553-2, or to be capable of withstanding the wind & impact loads in accordance with SANS





Constraint LOOR FACTOR MAXIMUM HEIGHT ABOVE BASE LEVEL STREET BOUNDARY UILDING LINE OMMON BOUNDARY BUILDING LINE WINDOWS & DOORS PARKING COVERAGE

PUBLIC SAFETY To comply with SANS 10400 Part D & B

# BALUSTRADES

1.0m high MS balustrade per N.B.R, max 100mm spacings between balusters The balustrades are a design and supply contract, and the subcontractor must provide a professional engineers certificate on completion. All shop drawings submitted for approval, need to be first signed off by the subcontractors professional engineer prior to submittal.

STAIRS & STEPS To comply with SANS 10400 Part M.

#### Min. 250mm treads Max. 200mm high risers

WATERPROOFING

#### To comply with SANS 10400 Part L. STORMWATER

To comply with SANS 10400 Part R.

### **RAINWATER GOODS**

100mm seamless aluminium box gutters on 225x12mm fibre cement fascia. PVC downpipes to discharge into catchpits and out to the street.

### PAINTING

All material finishes & colours to be in strict accordance with estate approved specifications

#### ENERGY EFFICIENCY REGULATIONS FLOORS:

Isoboard insulation under concrete slab min. R-Value of 1,0 Isoboard insulation around vertical edge perimeter of slab continuous from the finished ground level for the full depth of the vertical edge of concrete slab-on-ground min. R-Value of

#### EXTERNAL WALLS 50mm cavity walls with R-value exceeding 0.35

FENESTRATION To be in accordance with SANS 204 as per table to meet the

minimum energy performance requirements. ROOF ASSEMBLY

#### Min Total R-Value require = 3.7 Roof insulations as per SANS 204

Part XA calculations: R-Value 0.05

# Ceiling

Ceiling insulation - Radientshield R-value=1.36 Isotherm R-value = 2.3

## Lambda R-value = 1.0

Roof cover Total combined

R-Value 4.66 R-Value 0.35 R-Value 5.06

HOT WATER SUPPLY

#### All exposed hot water service pipes to and from hot water cylinders to be insulated with a min. R-Value of: 1 for pipes with a diameter of ≤80mm of 1.5 for pipes with a diameter of more than 80mm.

15mm wall thickness for pipes smaller than 25mm Ø and 25mm wall thickness for pipes bigger than 25mm Ø Hot water pipes to be insulated with Thermoflex Thermal insulation to be installed in accordance with the manufacturer's instructions and be protected against the effects of weather, sunlight & be able to withstand the temperatures within the pipina. Hot water vessels and tanks shall be insulated with a material achieving a min. R-Value of 2,0. Insulation on vessels, tanks and piping containing cooling water shall be protected by a vapour barrier on the outside of the insulation.

Pipes laid under walls or under surface slabs where any portion of a pipe passes under a building or slab, the following shall apply: a. such portion shall be installed inside a sleeve of internal diameter of at least 15mm plus the outside nominal

- diameter of such pipe; b. such portion shall be protected against the transmission of any load to it:
- c. such portion shall be laid without any change of direction, without any junctions; and
- d. the trench win which such portion is laid shall in no way impair the stability of any building, or interfere with, or

# affect any existing services.

#### DRAINAGE & PLUMBING To comply with SANS 10400 Part P

50mm Ø PVC waste pipes, 110mm diameter PVC sewer soil & ent pipes . LE's to all bends & junction covers at ground level. All waste pipe to be fully accessible. Access covers to all

ducts. Stainless steel covers to shower drains. All sanitary fittings to be connected separately. Drainage within driveways or under buildings or walls to be adequately protected. Any foundation within 1500mm c drain must be below the level of same drain line. Hot water cylinder = min. 2001 400kpa solar panel geyser. Min 50% of energy used in building to be renewable. RE's or it's at all bends and junctions with marked covers at ground level.

Reseal all traps to waste fittings.All waste pipes to be easily accessible for repair and cleaning. Closed system enter at 45° junctions. Access panels to sewer ducts to comply with part

pp.20.2.(a).(ii) of SANS10400600mm bends to drainage run.

MIN. depth 400mm above boundary i.c

any drainage falling near to foundations or under driveways, be 102Ø pentapipe protected, in accordance with part p24

# the NBR SANS10400.

75x51 PVC downpipes and 102Ø pipes and sumps to road. Paved areas to be graded to the on site storm water system. backwash to sewer system. Stormwater to be taken to road via surface channels.

Allow for the installation of 3 garden taps - positions to be confirmed on site. Supply 20Ø water connection

Supply 25Ø pipe with draw wire from dwelling to front boundary

CALCULATIONS FOR GUIDELINE COMPLIANCE

AREAS SUMMARY SITE

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VE	24m 0.6H / 15m within 18m from street boundary	Top of Parapet: 15m	COMPLIANT
	4.5 m	4.5m	COMPLIANT
	0m for first 18m perp. from street boundary line with max height 15m	0m and 1.5m on common boundary until 18m thereafter 4,5m	COMPLIANT
	1,5m from all common boundaries	Min. 1,5m from all common boundaries	COMPLIANT
	PT1 AREA APPLIES 1.25 BAYS PER UNIT	9 BAYS (incl. 2x VISITORS BAYS) 6 UNITS - 8 BAYS REQUIRED	COMPLIANT
	60%	FOOTPRINT = m <sup>2</sup> = %	COMPLIANT

# TOTAL NUMBER OF FLATS: 6 UNITS

SPECIFICATIONS

# FOUNDATIONS

All foundations to comply with SANS 10400 Part H. Excavations to comply with SANS 10400 Part G. 700x250mm concrete foundations to 280/250/230mm wall.

500x300mm concrete foundations to internal 115mm walls.

Reinforcing to concrete foundations as per Str. Eng. specifications. All concrete to foundations, floor slabs & beams to be ready-mixed type, strength to Str. eng. specifications. Articulation joints to Str. eng's specifications.

#### FLOOR CONSTRUCTION To comply with SANS 10400 Part J and Parts B and H.

Floor finish on minimum 50mm cement screed on 170mm RC slab on 30mm Isoboard insulation on 250micron DPM on well compacted sand fill, compacted in layers not exceeding 150mm. DPC weepholes to be minimum 150mm above the finished ground level all around. All to str. eng's specifications & inspections.

#### WALLS To comply with SANS 10400 Part K and Part B

External: 280mm & 230mm NFB SABS approved MAXI brick, smooth plastered & painted, colour to client's approval. Internal: 110mm NFB SABS approved solid ROK clay brick, smooth steel trowel finish plastered & painted. Internal window cills to be plastered and painted.

Control and articulation joints to engineer's specifications. Internal window cills to be plastered & painted, 375micron under all cills. Galvanized brickforce to all walls every four brick courses and to every course to foundations plinth walls and to every course above pre-stressed concrete lintol height all around. Pre-stressed concrete lintols above all windows, doors and opening to be laid to manufacturer's specifications and have a minimum bearing of 250mm for spans up to 2.5m & 350mm for spans greater than or equal to 2.5m

RC beams to engineer's detail. 375micron DPC under all cavity walls, above all windows, doors & external opening. vertical dpc to all windows & external doors.

# OPENINGS

All beams/lintols over opening exceeding 1000mm to Structural Engineer's detail. Lintols laid in accordance with manufacturer's specification. P.C lintols & 4 courses brickwork with brick-force every course over all openings not exceeding 3.0m

### SKIRTINGS

To be selected by client

ROOFS To comply with SANS 10400 Part I

TYPE A - MAIN HOUSE To comply with SANS 10400 Part I

#### TYPE A Waterproofed RC slab to str. eng's details.

Min combined roof and ceiling assembly R-Value: 3.7

## TYING OF ROOF

Rafters tied down to walls with 1.2mmx30mm GMS hoop iron straps embedded into wall. CEILINGS

9mm rhino board ceilings fixed to 38x38mm Grade 7 SABS approved SA Pine brandering at max. 400,, centres. Apply double fibretape over butt joints and skimmed with cretestone and painted. Apply min. 2x coats of 'grippon'. Cornices to be selected by client

#### WINDOWS AND DOORS

All external doors and windows to be powder-coated aluminium All internal doors to be timber to separate schedule

All glazing to comply with SANS 10400 Part N All windows and doors in brickwork to have full vertical and horizontal DPC

# See window calculation schedule

LIGHTING AND VENTILATION To comply with SANS 10400 Parts N & O External doors and windows: epoxy coated aluminium internal timber doors. Codes refer to separate door schedule.

All habitable rooms to have:

Min. 10% of floor area glazed Min. 5% of floor area for ventilation

Glazing: clear glazing to all windows to comply with SANS 10400 Part N & S 10137. Glazing below 500mm from floor level, access doors or larger than 1 m<sup>2</sup> to be safety Frames to receive glazing material to comply with SANS 727 or SANS 1553-2, or to

be capable of withstanding the wind & impact loads in accordance with SANS 10400 - B.

> ARCHITECT PAT3489789

SIGNATURE

CLIENT/CLENT REPRESENTATIVE -SEE POA

SIGNATURE

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VER DATE DESCRIPTION



# **ETERNITY SERVICES**

PROPOSED FLATS ON

EXISTING PROPERTY

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REG 2012/16618/07 admin@eternityservices.co.za

OCT 2019

VER:

0

DRAWN by: E.A-PAT34897891

PROJECT TITLE:

ON ERF:

SCALE:

PROJECT No.

2019/700

CLIENT:

DRAWING TITLE: PLANS

1:100

A1 size

45532 8 NURSERY ROAD

RONDEBOSCH

DATE :

DRWG No.

NSY SC 102

T.O.R 24 000 ₽	<u>ع</u> .			T.O.R 24 000		Idary
		ERF 45532	-	new RC wall for elevator to	20 Iniding	ERF 149115
T.O.R 22 000				T.O.R 22 000	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
FFL 19 000	masonry wall, plastered, primed & painted new glazed aluminium windows per Architect's schedule, RC slab over		2400	masonry wall, plastered, primed & painted new glazed aluminium windows per Architect's schedule, RC slab over		
FFL 16 000	new glazed aluminium sliding doors per Architect's schedule, RC slab over new handrail © 1.0m AFFL per N.B.R			new glazed aluminium 8 sliding doors per Architect's 8 schedule, RC slab over new handrail @ 1.0m AFFL per N.B.R	8	
FFL 13 000	new glazed aluminium sliding doors per Architect's schedule, RC slab over new handrail @ 1.0m AFFL per N.B.R		2400 2400	new glazed aluminium sliding doors per Architect's schedule, RC slab over new handrail @ 1.0m AFFL per N.B.R	17000	
FFL 10 000] V	new glazed aluminium sliding doors per Architect's schedule, RC slab over new handrail @ 1.0m AFFL per N.B.R new RC slab & downstand beam to str. eng's details new RC columns to str. eng's details			new glazed aluminium sliding doors per Architect's schedule, RC slab over new handrail @ 1.0m AFFL per N.B.R - new RC slab & downstand beam to str. eng's details - new RC columns to str. eng's details		

T.O.R 24 000

T.O.R 22 000

FFL 19 000

FFL 16 000

FFL 13 000

FFL 10 000

NURSERY ROAD

# NORTH WEST ELEVATION Scale 1:100

49115 og : eis		ERF 45532	building line
۵   	T.O.R 22 000	new RC wall for elevator to str. eng's details	
	FFL 19 000	new glazed aluminium windows per Architect' schedule, RC slab over	5
	FFL 16 000	new door per Architect schedule, RC slab over	's
	FFL 13 000		new handrail @ 1.0m
	FFL 10 000		new handrail @ 1.0m AFFL per N.B.R
			new handrail @ 1.0m AFFL per N.B.R

Scale 1:100

T.O.R 24 000			dary	[I.O.R 24 000]
ERF 45533-RE		ERF 45532		ERF 149115
T.O.R 22 000			+ · - · - · - · - · - · + · -	T.O.R 22 000
new glazed aluminium windows per Architect's schedule, RC slab over				new RC wall for elevator to str. eng's details     new glazed aluminium windows per Architect's 8 schedule, RC slab over 9
FFL 19 000		§		FFL 19 000
new glazed aluminium windows per Architect's schedule, RC slab over FFL 16 000	2400 2400 1500 1500			new glazed aluminium windows per Architect's schedule, RC slab over
new glazed aluminium windows per Architect's schedule, RC slab over FFL 13 000				
new glazed aluminium windows per Architect's schedule, RC slab over FFL 10 000	2400 900 1 500			new glazed aluminium windows per Architect's 8 schedule, RC slab over 8 FFL 10 000
new RC columns to str. eng's details		new RC columns to str. eng's details		
inol :				<u></u>

# SOUTH WEST ELEVATION

Scale 1:100

2000	T.O.R 24 000 ERF 149115	ERF 45532	ERF 45533-RE
	T.O.R 22 000		T.O.R 22 000
3000	new RC wall for elevator to str. eng's details new glazed aluminium windows per Architect's schedule, RC slab over FFL 19 000		new glazed aluminium windows per Architect' schedule, RC slab over FFL 19 000
1 3000	new glazed aluminium windows per Architect's schedule, RC slab over FFL 16 000		new glazed aluminium windows per Architect' schedule, RC slab over [FFL 16 000]
1 3000 17000	new glazed aluminium windows per Architect's schedule, RC slab over FFL 13 000		new glazed aluminium windows per Architect' schedule, RC slab over [FFL 13 000]
3000	new glazed aluminium windows per Architect's schedule, RC slab over FFL 10 000		new glazed aluminium windows per Architect schedule, RC slab over FFL 10 000
3000	new RC columns to ——— str. eng's details	new RC columns to str. eng's details	new RC columns to str. eng's details

NORTH EAST ELEVATION Scale 1:100

Constraint LOOR FACTOR MAXIMUM HEIGHT ABOVE BASE LEVEL STREET BOUNDARY BUILDING LINE COMMON BOUNDARY BUILDING LINE WINDOWS & DOORS PARKING

TOTAL NUMBER OF FLATS: 6 UNITS

COVERAGE

PUBLIC SAFETY To comply with SANS 10400 Part D & B

# BALUSTRADES

1.0m high MS balustrade per N.B.R, max 100mm spacings between balusters. The balustrades are a design and supply contract, and the subcontractor must provide a professional engineers certificate on completion. All shop drawings submitted for approval, need to be first signed off by the subcontractors professional engineer prior to submittal.

STAIRS & STEPS To comply with SANS 10400 Part M. Min. 250mm treads

# Max. 200mm high risers

WATERPROOFING To comply with SANS 10400 Part L.

# STORMWATER

To comply with SANS 10400 Part R.

# RAINWATER GOODS

100mm seamless aluminium box gutters on 225x12mm fibre cement fascia. PVC downpipes to discharge into catchpits and out to the street.

#### PAINTING

All material finishes & colours to be in strict accordance with estate approved specifications

#### ENERGY EFFICIENCY REGULATIONS FLOORS:

Isoboard insulation under concrete slab min. R-Value of 1,0 Isoboard insulation around vertical edge perimeter of slab continuous from the finished ground level for the full depth of the vertical edge of concrete slab-on-ground min. R-Value of

#### EXTERNAL WALLS 50mm cavity walls with R-value exceeding 0.35

FENESTRATION

To be in accordance with SANS 204 as per table to meet the minimum energy performance requirements.

#### ROOF ASSEMBLY Min Total R-Value require = 3.7

Roof insulations as per SANS 204 Part XA calculations: R-Value 0.05

# Ceiling

Ceiling insulation - Radientshield R-value=1.36 Isotherm R-value = 2.3

#### Lambda R-value = 1.0

Roof cover Total combined

R-Value 4.66 <u>R-Value 0.35</u> R-Value 5.06

HOT WATER SUPPLY

All exposed hot water service pipes to and from hot water cylinders to be insulated with a min. R-Value of: 1 for pipes with a diameter of ≤80mm of 1.5 for pipes with a diameter of more than 80mm.

15mm wall thickness for pipes smaller than 25mm Ø and 25mm wall thickness for pipes bigger than 25mm Ø Hot water pipes to be insulated with Thermoflex Thermal insulation to be installed in accordance with the manufacturer's instructions and be protected against the effects of weather, sunlight & be able to withstand the temperatures within the piping. Hot water vessels and tanks shall be insulated with a material achieving a min. R-Value of 2,0. Insulation on vessels, tanks and piping containing cooling water shall be protected by a vapour barrier on the outside of the insulation.

Pipes laid under walls or under surface slabs where any portion of a pipe passes under a building or slab, the following shall apply: a. such portion shall be installed inside a sleeve of internal

- diameter of at least 15mm plus the outside nominal diameter of such pipe; b. such portion shall be protected against the transmission
- of any load to it: c. such portion shall be laid without any change of direction, without any junctions; and
- d. the trench win which such portion is laid shall in no way impair the stability of any building, or interfere with, or

# affect any existing services.

#### DRAINAGE & PLUMBING To comply with SANS 10400 Part P

50mm Ø PVC waste pipes, 110mm diameter PVC sewer soil & ent pipes . LE's to all bends & junctions: 1 covers at ground level. All waste pipe to be fully accessible. Access covers to all

ducts. Stainless steel covers to shower drains. All sanitary fittings to be connected separately. Drainage within driveways or under buildings or walls to be adequately protected. Any foundation within 1500mm of drain must be below the level of same drain line. Hot water cylinder = min. 2001 400kpa solar panel geyser. Min 50% of energy used in building to be renewable. RE's or it's at all bends and junctions with marked covers at ground level.

Reseal all traps to waste fittings.All waste pipes to be easily accessible for repair and cleaning. Closed system enter at 45° junctions. Access panels to sewer ducts to comply with part

pp.20.2.(a).(ii) of SANS10400600mm bends to drainage run.

MIN. depth 400mm above boundary i.c. any drainage falling near to foundations or under driveways, be 102Ø pentapipe protected, in accordance with part p24

the NBR SANS10400. 75x51 PVC downpipes and 102Ø pipes and sumps to road. Paved areas to be graded to the on site storm water system. backwash to sewer system.

Stormwater to be taken to road via surface channels. Allow for the installation of 3 garden taps - positions to be confirmed on site.

Supply 200 water connection Supply 25Ø pipe with draw wire from dwelling to front

CALCULATIONS FOR GUIDELINE COMPLIANCE

AREAS SUMMARY SITE

boundary

First storey	=	108.50m <sup>2</sup>
First storey terraces	=	31.61m²
Second storey	=	108.50m <sup>2</sup>
Second storey terraces	=	31.61m²
Third storey	=	117.76m²
Third storey terraces	=	22.69m <sup>2</sup>
Fourth storey	=	117.76m²
ERF AREA	=	331m²

# COMPLIANCE WITH THE CITY OF CAPE TOWN ZONING SCHEME

CURRENT ZONING: GENERAL RESIDENTIAL 4 (GR4)

	Allowable	Achieved	Compliance
	1.5	New TOTAL floor area: 470 sq.m. Erf size: 331 sq.m. Allowable Floor Factor = 497sq.m.	COMPLIANT
VE	24m 0.6H / 15m within 18m from street boundary	Top of Parapet: 15m	COMPLIANT
	4.5 m	4.5m	COMPLIANT
	0m for first 18m perp. from street boundary line with max height 15m	0m and 1.5m on common boundary until 18m thereafter 4,5m	COMPLIANT
	1,5m from all common boundaries	Min. 1,5m from all common boundaries	COMPLIANT
	PT1 AREA APPLIES 1.25 BAYS PER UNIT	9 BAYS (incl. 2x VISITORS BAYS) 6 UNITS - 8 BAYS REQUIRED	COMPLIANT
	60%	FOOTPRINT = m <sup>2</sup> = %	COMPLIANT

SPECIFICATIONS FOUNDATIONS

# All foundations to comply with SANS 10400 Part H. Excavations to comply with SANS 10400 Part G. 700x250mm concrete foundations to 280/250/230mm wall.

500x300mm concrete foundations to internal 115mm walls.

Reinforcing to concrete foundations as per Str. Eng. specifications. All concrete to foundations, floor slabs & beams to be ready-mixed type, strength to Str. eng. specifications. Articulation joints to Str. eng's specifications.

# FLOOR CONSTRUCTION

To comply with SANS 10400 Part J and Parts B and H. Floor finish on minimum 50mm cement screed on 170mm RC slab on 30mm Isoboard insulation on 250micron DPM on well compacted sand fill, compacted in layers not exceeding 150mm. DPC weepholes to be minimum 150mm above the finished ground level all around. All to str. eng's specifications & inspections.

#### WALLS To comply with SANS 10400 Part K and Part B

External: 280mm & 230mm NFB SABS approved MAXI brick, smooth plastered & painted, colour to client's approval. Internal: 110mm NFB SABS approved solid ROK clay brick, smooth steel trowel finish plastered & painted. Internal window cills to be plastered and painted.

Control and articulation joints to engineer's specifications. Internal window cills to be plastered & painted, 375micron under all cills. Galvanized brickforce to all walls every four brick courses and to every course to foundations plinth walls and to every course above pre-stressed concrete lintol height all around. Pre-stressed concrete lintols above all windows, doors and opening to be laid to manufacturer's specifications and have a minimum bearing of 250mm for spans up to 2.5m & 350mm for spans greater than or equal to 2.5m

RC beams to engineer's detail. 375micron DPC under all cavity walls, above all windows, doors & external opening. vertical dpc to all windows & external doors.

# OPENINGS

All beams/lintols over opening exceeding 1000mm to Structural Engineer's detail. Lintols laid in accordance with manufacturer's specification. P.C lintols & 4 courses brickwork with brick-force every course over all openings not exceeding 3.0m

#### SKIRTINGS

To be selected by client

ROOFS To comply with SANS 10400 Part I

TYPE A - MAIN HOUSE To comply with SANS 10400 Part I

#### TYPE A Waterproofed RC slab to str. eng's details.

Min combined roof and ceiling assembly R-Value: 3.7

#### TYING OF ROOF Rafters tied down to walls with 1.2mmx30mm GMS hoop iron straps embedded into

wall. CEILINGS 9mm rhino board ceilings fixed to 38x38mm Grade 7 SABS approved SA Pine

brandering at max. 400, centres. Apply double fibretape over butt joints and skimmed with cretestone and painted. Apply min. 2x coats of 'grippon'. Cornices to be selected by client

#### WINDOWS AND DOORS

All external doors and windows to be powder-coated aluminium All internal doors to be timber to separate schedule

#### All glazing to comply with SANS 10400 Part N All windows and doors in brickwork to have full vertical and horizontal DPC See window calculation schedule

LIGHTING AND VENTILATION

To comply with SANS 10400 Parts N & O External doors and windows: epoxy coated aluminium internal timber doors. Codes refer to separate door schedule.

All habitable rooms to have: Min. 10% of floor area glazed

Min. 5% of floor area for ventilation

Glazing: clear glazing to all windows to comply with SANS 10400 Part N & S 10137. Glazing below 500mm from floor level, access doors or larger than 1m<sup>2</sup> to be safety Frames to receive glazing material to comply with SANS 727 or SANS 1553-2, or to

be capable of withstanding the wind & impact loads in accordance with SANS 10400 - B.

> ARCHITECT PAT3489789

SIGNATURE

CLIENT/CLENT REPRESENTATIVE SEE POA

SIGNATURE

The design on this drawing is copyright and remains the property of eternity services. All work to be carried out strictly in accordance with municipal regulations. Figured dimensions to be taken in preference to scaling drawing. The contractor and his sub-contractors must check all relevant details and dimensions before commencing work on site or manufacture of components. Any discrepancies must be reported to the eternity services immediately.

VER DATE DESCRIPTION



# **ETERNITY SERVICES**

PROPOSED FLATS ON

EXISTING PROPERTY

TEL FAX +27 086 950 9790 EMAIL

+27 074 418 7577 ETERNITY SERVICES (PTY) LTD REG 2012/16618/07 admin@eternityservices.co.za

PROJECT TITLE:

ON ERF:

CLIENT:

45532

8 NURSERY ROAD Rondebosch

# DRAWING TITLE: ELEVATIONS

OCT 2019 SCALE: DATE : 1:100 DRAWN by: E.A-PAT34897891 A1 size PROJECT No. DRWG No. VER: 2019/700 NSY SC 200 0

NURSERY ROAD	T.O.R 24 000	ERF 45532	<u><u><u>e</u></u><u><u>T.O.R 24 000</u></u></u>	ERF 149115
site po	, , , , , , , , , , , , , , , , , , ,		new RC wall for elevator to	
	T.O.R 22 000		T.O.R 22 000	
	new glazed aluminium windows per Architect's schedule, RC slab over FFL 19 000	BATH	new glazed aluminium vindows per Architect's schedule, RC slab over FFL 19 000 V	
	new glazed aluminium windows per Architect's schedule, RC slab over FFL 16 000	BATH LIVING LIVING BATH	new glazed aluminium y or windows per Architect's schedule, RC slab over RC slab over	
	new glazed aluminium windows per Architect's schedule, RC slab over	BATH LIVING LIVING BATH	new glazed aluminium windows per Architect's schedule, RC slab over 00 FFL 13 000 FFL 13 000	
	new glazed aluminium windows per Architect's schedule, RC slab over FFL 10 000 new RC slab &	BATH LIVING LIVING BATH	new glazed aluminium windows per Architect's schedule, RC slab over	
	downstand beam to str. eng's details new RC columns to str. eng's details NGL		<ul> <li>new RC columns to str.</li> <li>eng's details</li> <li>new RC columns to str.</li> <li>eng's details</li> <li>NGL</li> </ul>	

SECTION AA Scale 1:100

CURRENT ZO	١
Constraint	
FLOOR FACTOR	
MAXIMUM HEIGHT ABOVE BASE LEVEL	
STREET BOUNDARY BUILDING LINE	
COMMON BOUNDARY BUILDING LINE	
WINDOWS & DOORS	
PARKING	
COVERAGE	
	- 1

Reinforcing to concrete foundations as per Str. Eng. specifications. All concrete to

Isoboard insulation on 250micron DPM on well compacted sand fill, compacted in layers not exceeding 150mm. DPC weepholes to be minimum 150mm above the

foundations, floor slabs & beams to be ready-mixed type, strength to Str. eng. specifications. Articulation joints to Str. eng's specifications.

To comply with SANS 10400 Part J and Parts B and H. Floor finish on minimum 50mm cement screed on 170mm RC slab on 30mm

finished ground level all around. All to str. eng's specifications & inspections.

External: 280mm & 230mm NFB SABS approved MAXI brick, smooth plastered &

plastered & painted. Internal window cills to be plastered and painted.

Control and articulation joints to engineer's specifications.

opening. vertical dpc to all windows & external doors.

Waterproofed RC slab to str. eng's details. Min combined roof and ceiling assembly R-Value: 3.7

Lintols laid in accordance with manufacturer's specification.

painted, colour to client's approval. Internal: 110mm NFB SABS approved solid ROK clay brick, smooth steel trowel finish

Internal window cills to be plastered & painted, 375micron under all cills. Galvanized brickforce to all walls every four brick courses and to every course to

foundations plinth walls and to every course above pre-stressed concrete lintol height all around. Pre-stressed concrete lintols above all windows, doors and

opening to be laid to manufacturer's specifications and have a minimum bearing

of 250mm for spans up to 2.5m & 350mm for spans greater than or equal to 2.5m

All beams/lintols over opening exceeding 1000mm to Structural Engineer's detail.

P.C lintols & 4 courses brickwork with brick-force every course over all openings not

Rafters tied down to walls with 1.2mmx30mm GMS hoop iron straps embedded into

9mm rhino board ceilings fixed to 38x38mm Grade 7 SABS approved SA Pine

brandering at max. 400,, centres. Apply double fibretape over butt joints and skimmed with cretestone and painted. Apply min. 2x coats of 'grippon'.

All windows and doors in brickwork to have full vertical and horizontal DPC

External doors and windows: epoxy coated aluminium internal timber doors. Codes

Glazing: clear glazing to all windows to comply with SANS 10400 Part N & S 10137. Glazing below 500mm from floor level, access doors or larger than 1m<sup>2</sup> to be safety

Frames to receive glazing material to comply with SANS 727 or SANS 1553-2, or to

be capable of withstanding the wind & impact loads in accordance with SANS

All external doors and windows to be powder-coated aluminium

All internal doors to be timber to separate schedule

All glazing to comply with SANS 10400 Part N

375micron DPC under all cavity walls, above all windows, doors & external

All foundations to comply with SANS 10400 Part H. Excavations to comply with SANS 10400 Part G. 700x250mm concrete foundations to 280/250/230mm wall.

500x300mm concrete foundations to internal 115mm walls.

To comply with SANS 10400 Part K and Part B

RC beams to engineer's detail.

SPECIFICATIONS

FLOOR CONSTRUCTION

FOUNDATIONS

WALLS

OPENINGS

SKIRTINGS

ROOFS

TYPE A

wall.

CEILINGS

10400 - B.

exceeding 3.0m

To be selected by client

TYPE A - MAIN HOUSE

TYING OF ROOF

To comply with SANS 10400 Part I

To comply with SANS 10400 Part I

Cornices to be selected by client

See window calculation schedule

To comply with SANS 10400 Parts N & O

Min. 5% of floor area for ventilation

LIGHTING AND VENTILATION

refer to separate door schedule.

Min. 10% of floor area glazed

All habitable rooms to have:

WINDOWS AND DOORS

PUBLIC SAFETY To comply with SANS 10400 Part D & B

# BALUSTRADES

1.0m high MS balustrade per N.B.R, max 100mm spacings between balusters. The balustrades are a design and supply contract, and the subcontractor must provide a professional engineers certificate on completion. All shop drawings submitted for approval, need to be first signed off by the subcontractors professional engineer prior to submittal.

STAIRS & STEPS To comply with SANS 10400 Part M. Min. 250mm treads

# Max. 200mm high risers

WATERPROOFING

### To comply with SANS 10400 Part L. STORMWATER

To comply with SANS 10400 Part R.

## RAINWATER GOODS

100mm seamless aluminium box gutters on 225x12mm fibre cement fascia. PVC downpipes to discharge into catchpits and out to the street.

#### PAINTING

All material finishes & colours to be in strict accordance with estate approved specifications

#### ENERGY EFFICIENCY REGULATIONS FLOORS:

Isoboard insulation under concrete slab min. R-Value of 1,0 Isoboard insulation around vertical edge perimeter of slab continuous from the finished ground level for the full depth of the vertical edge of concrete slab-on-ground min. R-Value of

#### EXTERNAL WALLS 50mm cavity walls with R-value exceeding 0.35

FENESTRATION To be in accordance with SANS 204 as per table to meet the

minimum energy performance requirements. ROOF ASSEMBLY Min Total R-Value require = 3.7

# Roof insulations as per SANS 204

Part XA calculations: R-Value 0.05

# Ceiling

Ceiling insulation
Radientshield R-value=1.36
Isotherm R-value = 2.3

#### Lambda R-value = 1.0

Roof cover Total combined

R-Value 4.66 <u>R-Value 0.35</u> R-Value 5.06

### HOT WATER SUPPLY

All exposed hot water service pipes to and from hot water cylinders to be insulated with a min. R-Value of: 1 for pipes with a diameter of ≤80mm of 1.5 for pipes with a diameter of more than 80mm.

15mm wall thickness for pipes smaller than 25mm Ø and 25mm wall thickness for pipes bigger than 25mm Ø Hot water pipes to be insulated with Thermoflex Thermal insulation to be installed in accordance with the manufacturer's instructions and be protected against the effects of weather, sunlight & be able to withstand the temperatures within the piping. Hot water vessels and tanks shall be insulated with a material achieving a min. R-Value of 2,0. Insulation on vessels, tanks and piping containing cooling water shall be protected by a vapour barrier on the outside of the insulation.

Pipes laid under walls or under surface slabs where any portion of a pipe passes under a building or slab, the following shall apply: a. such portion shall be installed inside a sleeve of internal

- diameter of at least 15mm plus the outside nominal diameter of such pipe; b. such portion shall be protected against the transmission
- of any load to it: c. such portion shall be laid without any change of direction, without any junctions; and
- d. the trench win which such portion is laid shall in no way impair the stability of any building, or interfere with, or

# affect any existing services.

#### DRAINAGE & PLUMBING To comply with SANS 10400 Part P

50mm Ø PVC waste pipes, 110mm diameter PVC sewer soil & ent pipes . LE's to all bends & junctic covers at ground level.

All waste pipe to be fully accessible. Access covers to all ducts. Stainless steel covers to shower drains. All sanitary fittings to be connected separately. Drainage within driveways or under buildings or walls to be adequately protected. Any foundation within 1500mm of drain must be below the level of same drain line. Hot water cylinder = min. 2001 400kpa solar panel geyser. Min 50% of energy used in building to be renewable. RE's or it's at all bends and junctions with marked covers at ground level.

Reseal all traps to waste fittings.All waste pipes to be easily accessible for repair and cleaning. Closed system enter at 45° junctions. Access panels to sewer ducts to comply with part

pp.20.2.(a).(ii) of SANS10400600mm bends to drainage run.

MIN. depth 400mm above boundary i.c.

any drainage falling near to foundations or under driveways, be 102Ø pentapipe protected, in accordance with part p24

# the NBR SANS10400.

75x51 PVC downpipes and 102Ø pipes and sumps to road. Paved areas to be graded to the on site storm water system. backwash to sewer system. Stormwater to be taken to road via surface channels.

Allow for the installation of 3 garden taps - positions to be confirmed on site. Supply 20Ø water connection.

Supply 25Ø pipe with draw wire from dwelling to front boundary

CALCULATIONS FOR GUIDELINE COMPLIANCE

# AREAS SUMMARY SITE

First storey	=	108.50m <sup>2</sup>
First storey terraces	=	31.61m²
Second storey	=	108.50m <sup>2</sup>
Second storey terraces	=	31.61m²
Third storey	=	117.76m <sup>2</sup>
Third storey terraces	=	22.69m <sup>2</sup>
Fourth storey	=	117.76m <sup>2</sup>
ERF AREA	=	331m²

COMPLIANCE WITH THE CITY OF CAPE TOWN ZONING SCHEME

T ZONING: GENERAL RESIDENTIAL 4 (GR4)

	Allowable	Achieved	Compliance
	1.5	New TOTAL floor area: 470 sq.m. Erf size: 331 sq.m. Allowable Floor Factor = 497sq.m.	COMPLIANT
VE	24m 0.6H / 15m within 18m from street boundary	Top of Parapet: 15m	COMPLIANT
	4.5 m	4.5m	COMPLIANT
	0m for first 18m perp. from street boundary line with max height 15m	0m and 1.5m on common boundary until 18m thereafter 4,5m	COMPLIANT
	1,5m from all common boundaries	Min. 1,5m from all common boundaries	COMPLIANT
	PT1 AREA APPLIES 1.25 BAYS PER UNIT	9 BAYS (incl. 2x VISITORS BAYS) 6 UNITS - 8 BAYS REQUIRED	COMPLIANT
	60%	FOOTPRINT = m <sup>2</sup> = %	COMPLIANT

# TOTAL NUMBER OF FLATS: 6 UNITS

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VER DATE DESCRIPTION



TEL FAX

REG 2012/16618/07 admin@eternityservices.co.za

PROJECT TITLE: PROPOSED FLATS ON

ON ERF:

CLIENT:

45532

**8 NURSERY ROAD** Rondebosch

# DRAWING TITLE: SECTIONS

SCALE:	1:100 A1 size	<b>DATE :</b> DRAWN by:	OCT 2019 : E.A-PAT34897891				
PROJECT No. 2019/700		DRWG No.		VER:			
		NSY SC 20	01	0			



# 23.10.2019 Issue for INFORMATION



CLIENT/CLENT REPRESENTATIVE SEE POA

EXISTING PROPERTY





ARCHITECT

SIGNATURE

PAT34897891