

SIDE VIEW

FRONT VIEW

GENERAL VIEW OF DE MONTFORT (MARK III) INCINERATOR

NOTES

- 1). All dimensions in millimetres unless otherwise indicated
- 2). All levels in metres above sea level

REPUBLIC OF UGANDA
MINISTRY OF HEALTH

IMPROVEMENT OF HEALTH CARE WASTE MANAGEMENT
IN UGANDA

INCINERATOR (MARK 3) DESIGN DRAWINGS

GENERAL VIEW

DRAWING NO.

MOH/HCWMM/K1.0



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Scale: NOT TO SCALE

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Checked: HB

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REPUBLIC OF UGANDA MINISTRY OF HEALTH

IMPROVEMENT OF HEALTH CARE WASTE MANAGEMENT
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INCINERATOR (MARK 3) DESIGN DRAWINGS

FIRE BRICK CORE LAYERS IN THE
SEQUENCE OF CONSTRUCTION

DRAWING NO.
MOH/HCWMM/K2.0



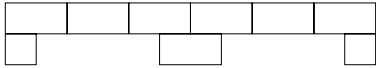
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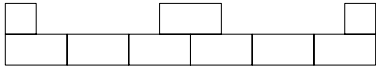
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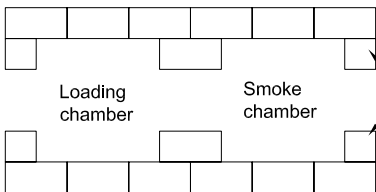
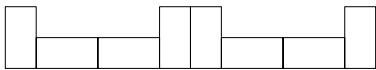
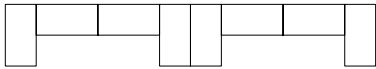
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LAYER 4



LAYER 3

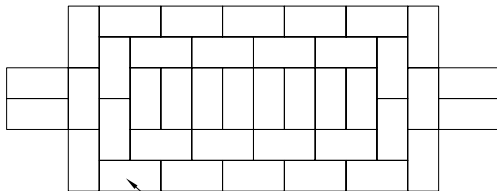


Loading
chamber

Smoke
chamber

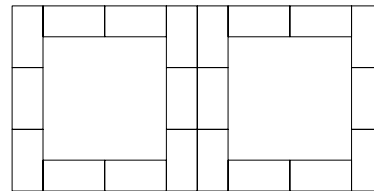
half bricks

LAYER 2

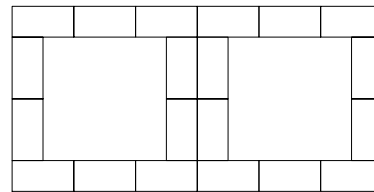


LAYER 1

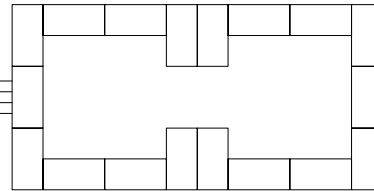
Fire brick base



LAYER 7,9,11,13



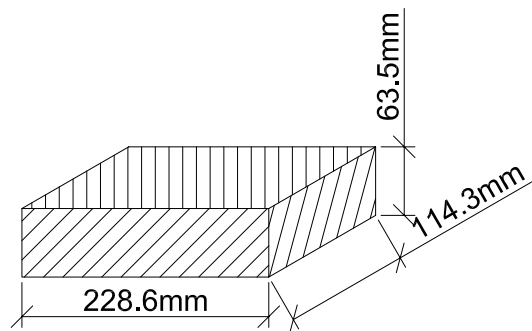
LAYER 6,8,10,12,14



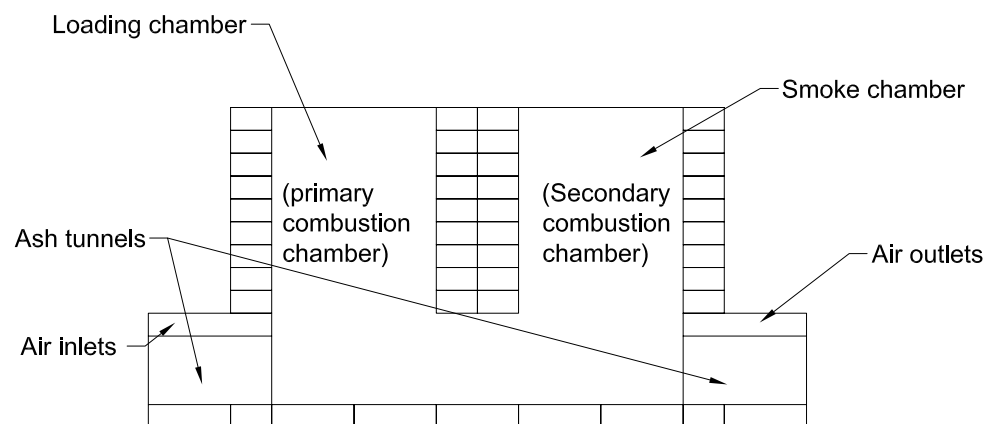
LAYER 5

Air inlets
3No. RHS 60x40x3mm

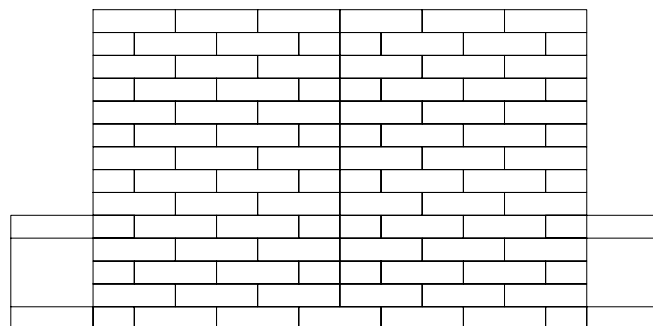
Air outlet
1No. RHS 50x25x3mm



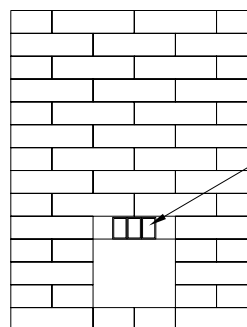
FIRE BRICK
scale 1:5



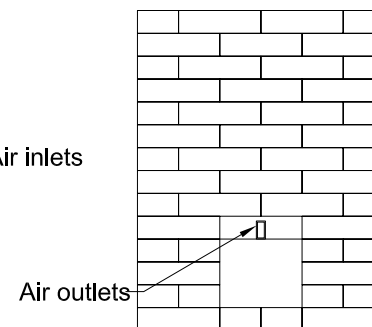
SECTION THROUGH FIRE BRICK CORE
scale 1:15



SIDE ELEVATION
scale 1:15



FRONT ELEVATION
scale 1:15



BACK ELEVATION
scale 1:15

NOTES

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REPUBLIC OF UGANDA
MINISTRY OF HEALTH

IMPROVEMENT OF HEALTH CARE WASTE MANAGEMENT
IN UGANDA

INCINERATOR (MARK 3) DESIGN DRAWINGS

FIRE BRICK CORE
SECTION AND ELEVATION

DRAWING NO.
MOH/HCWMMK3.0



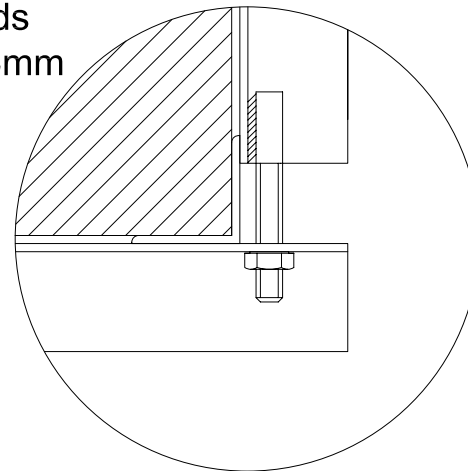
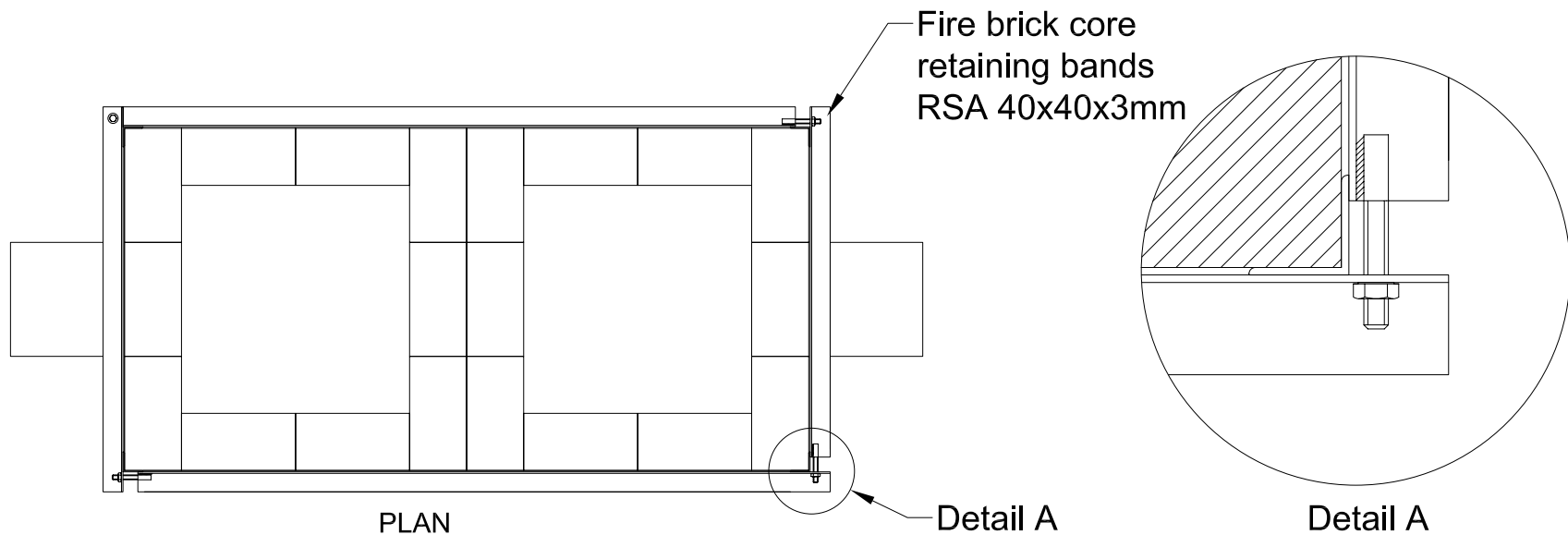
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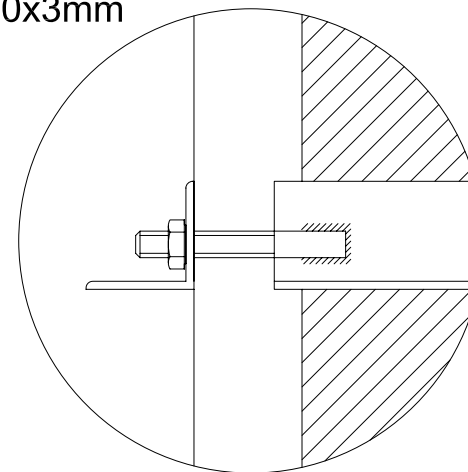
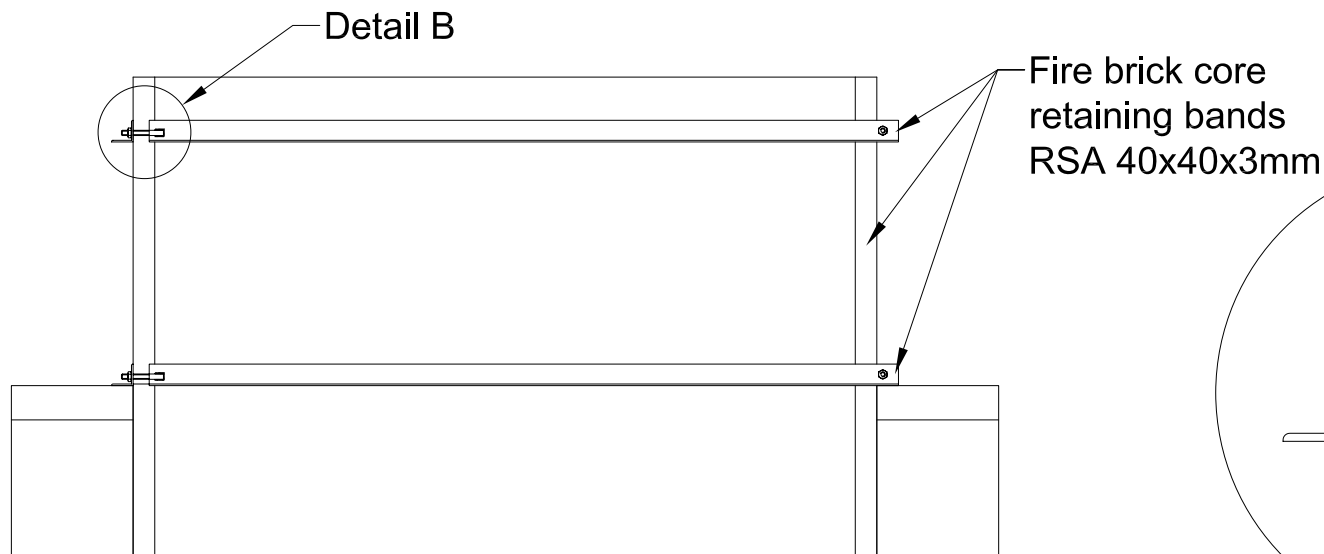
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Drawn by: A.L

Checked: HB



Detail A
scale 1:2



Detail B
scale 1:2

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REPUBLIC OF UGANDA
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IN UGANDA

INCINERATOR (MARK 3) DESIGN DRAWINGS

FIRE BRICK CORE
CONSTRUCTION DETAILS

DRAWING NO.

MOH/HCWMM/K4.0



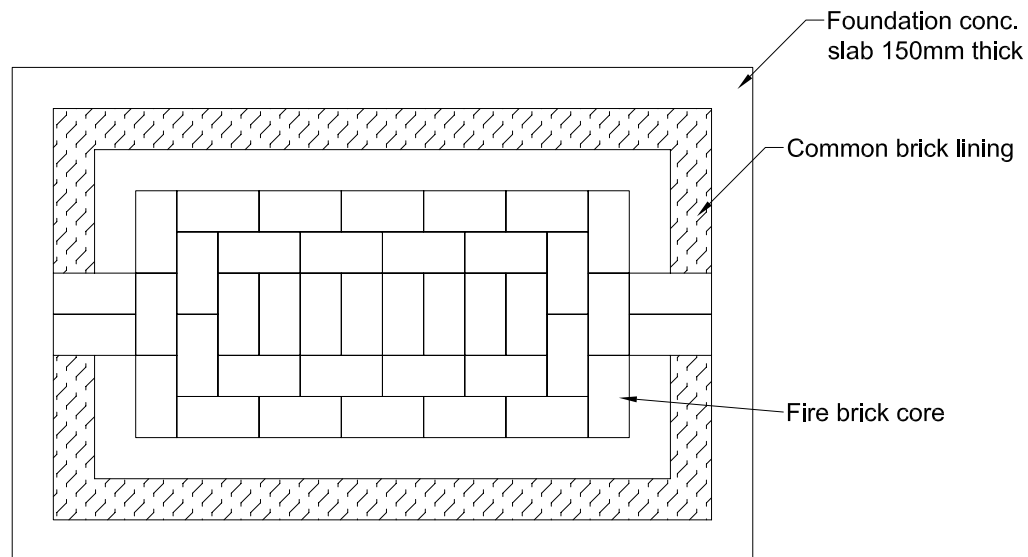
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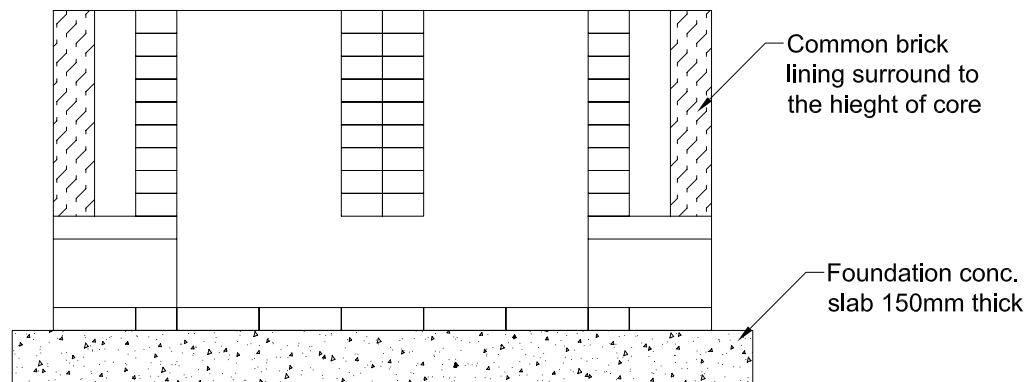
Scale: AS SHOWN

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PLAN



SECTION
COMMON BRICK SURROUND DETAIL

NOTES

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REPUBLIC OF UGANDA MINISTRY OF HEALTH

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IN UGANDA

INCINERATOR (MARK 3) DESIGN DRAWINGS

COMMON BRICK LINNIG
DETAILS

DRAWING NO.
MOH/HCWMM/K5.0



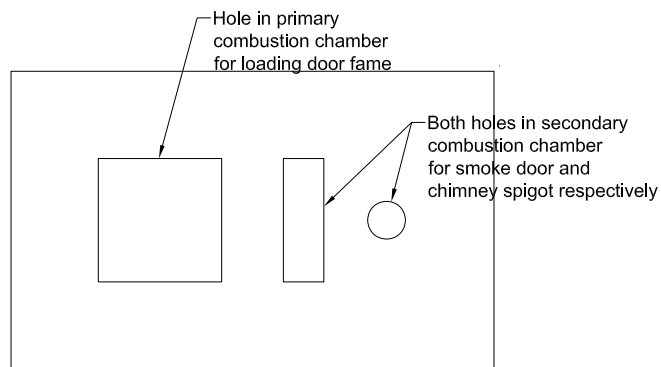
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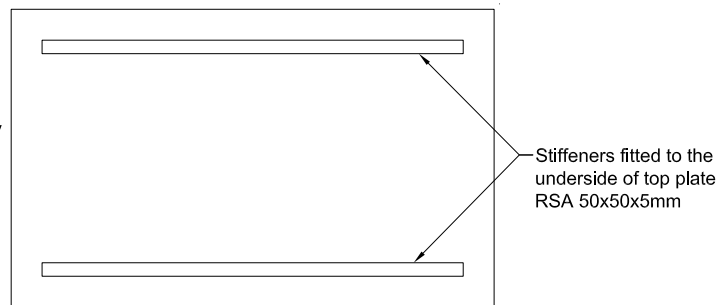
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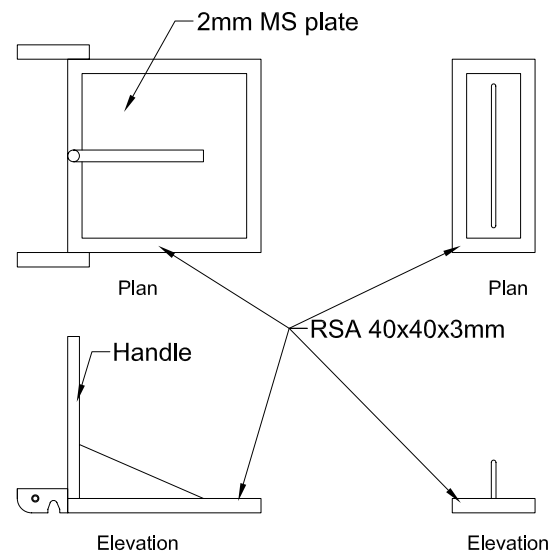
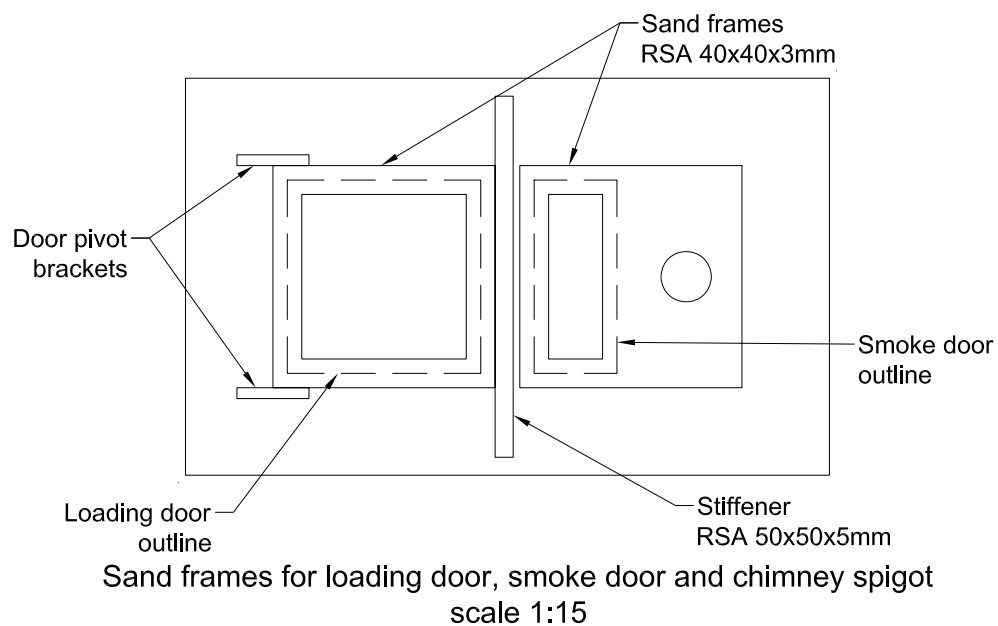
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Top plate 2mm thick and 20mm less than brick surround
scale 1:20



Top plate stiffeners
scale 1:20



Loading door
scale 1:15

Smoke door
scale 1:15

NOTES

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REPUBLIC OF UGANDA MINISTRY OF HEALTH

IMPROVEMENT OF HEALTH CARE WASTE MANAGEMENT
IN UGANDA

INCINERATOR (MARK 3) DESIGN DRAWINGS

TOP PLATE, SAND FRAMES AND
DOOR DETAILS

DRAWING NO.
MOH/HCWMM/K6.0



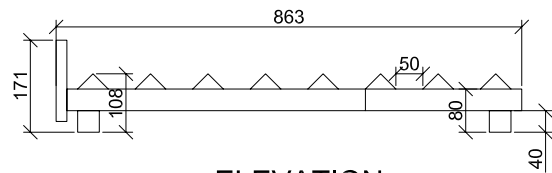
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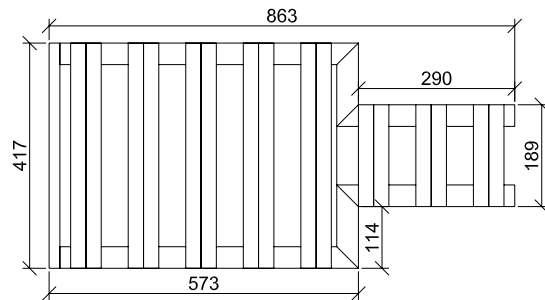
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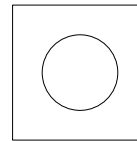


ELEVATION

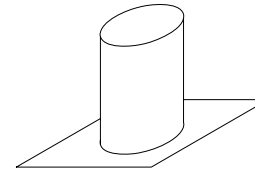


PLAN

Fire grate (40x40x3mm RSA)
scale 1:10

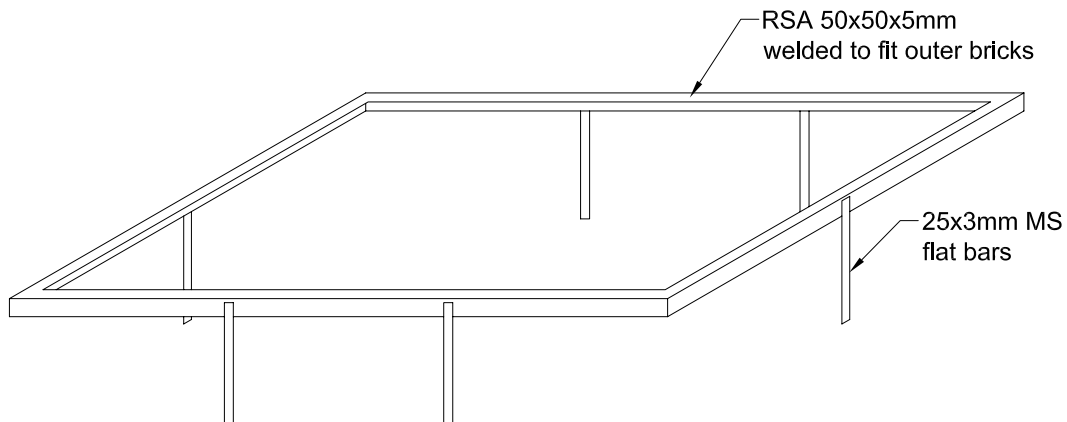


Plan



Isometric view

Chimney spigot
scale 1:10



Top plate retaining frame
scale 1:15

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IN UGANDA

INCINERATOR (MARK 3) DESIGN DRAWINGS

ACCESSORIES

DRAWING NO.

MOH/HCWMM/K7.0



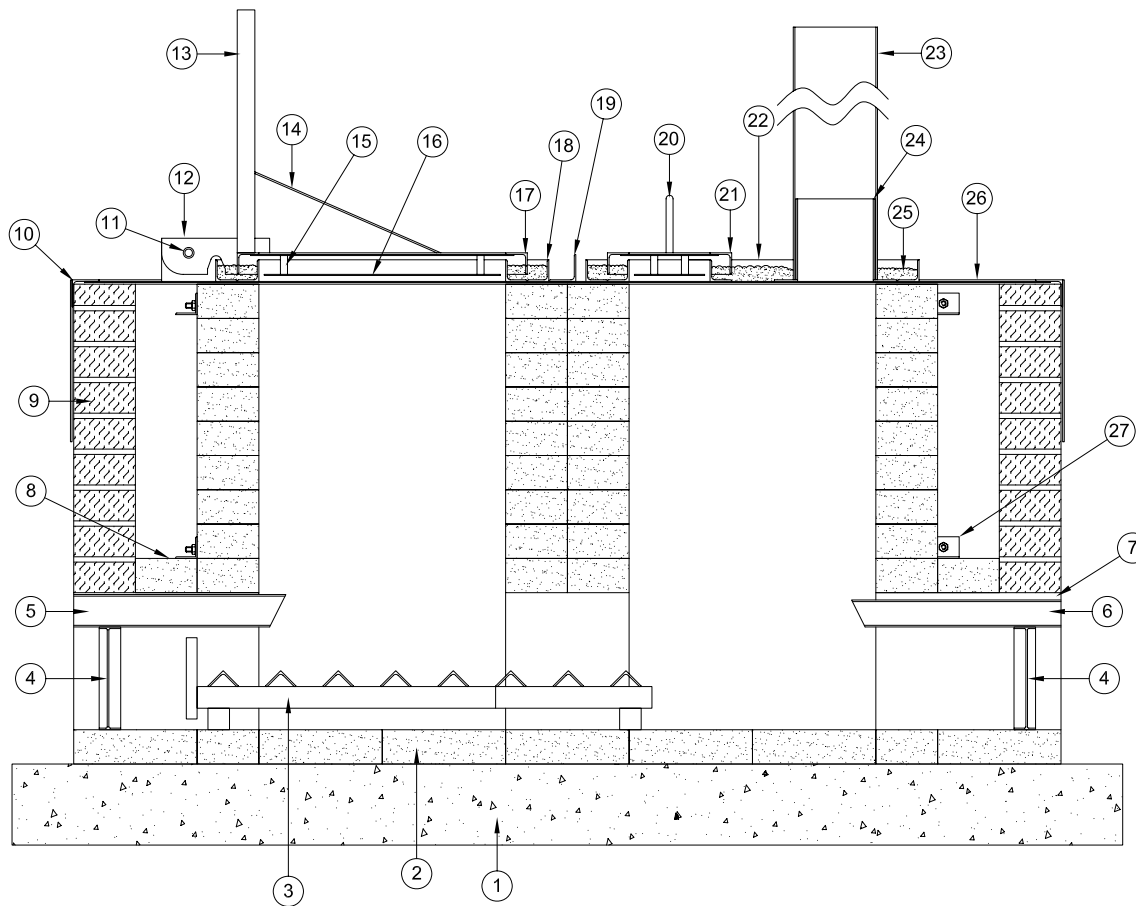
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DETAILED SECTION THROUGH INCINERATOR

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REPUBLIC OF UGANDA MINISTRY OF HEALTH

IMPROVEMENT OF HEALTH CARE WASTE MANAGEMENT
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INCINERATOR (MARK 3) DESIGN DRAWINGS

DETAILED SECTION

DRAWING NO.

MOH/HCWMM/K8.0



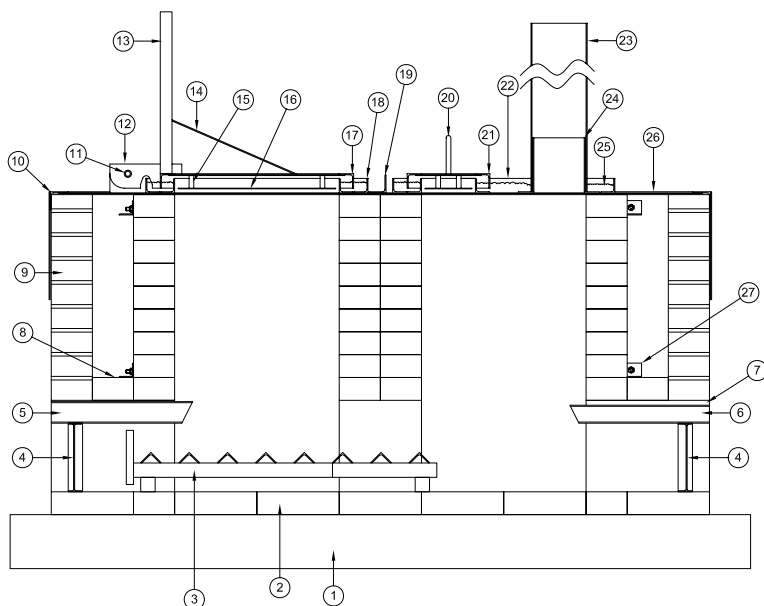
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Scale: 1:10

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DETAILED SECTION THROUGH INCINERATOR

Item	Description	Material	Quantity
1	Concrete foundation 150mm thick (1:2:3) cement, sand & ballast		0.423m ³
2	Fire bricks 9x4.5x2.5inches (228.6x114.3x63.5mm)		255
3	Fire grate (40x40x3mm RSA)	RSA 40x40x3mm	4.8m
4	Ash door (228x190mm)	M.S. plates	2
5	Air inlets, 3No. 60x40x3mm RHS (Area 6327mm ²)	60x40x3mm RHS	3
6	Air outlet 1No. 50x25x3mm RHS (Area 1034mm ²)	50x25x3mm RHS	1
7	Fire clay seal (around air ducts)		10Kg
8	Fire brick to seal voids with fire clay		8
9	Common brick outer skin		
10	Top plate retaining frame	50x50x5mm RSA, 25x3mm MS flats	5.9m, 1.8m
11	Loading door hing (pivot)	20mm dia bar 75mm long	2
12	Hing support bracket	140x80 MS plate 3mm	4
13	Loading door handle CHS	34mm dia CHS 450mm long x3mm	1
14	Handle stiffener	25x3mm MS flat bar	1
15	Baffle plate support	13mm dia bar 35mm long	8 (280mm)
16	Baffle plate	2mm MS plate (437x437)	
17	Loading door	40x40x3mm RSA 537x537	2.148m
18	Loading door sand frame	40x40x3mm RSA	4.084m
19	RSA top plate stiffener	50x50x5mm RSA	3
20	Smoke door handle	13mm dia 740mm long	740mm
21	Smoke door	40x40x3mm RSA 457x230	1.454m
22	Smoke door snad frame	40x40x3mm RSA	1.84m
23	150mm dia MS chimney 4m high CHS	150mm dia 5mm thick CHS	4m
24	Chimney spigot	140mm dia 5mm thick CHS	150mm
25	Sand seal		
26	Top plate	1.789x1.104	
27	RSA straps / retaining bands	40x40x3mm RSA	

PLEASE NOT THIS IS NOT A BOQ BUT AN ITEM DESCRIPTION

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REPUBLIC OF UGANDA MINISTRY OF HEALTH

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IN UGANDA

INCINERATOR (MARK 3) DESIGN DRAWINGS

DETAILED SECTION WITH
MATERIAL SCHEDULE

DRAWING NO.

MOH/HCWMM/K9.0



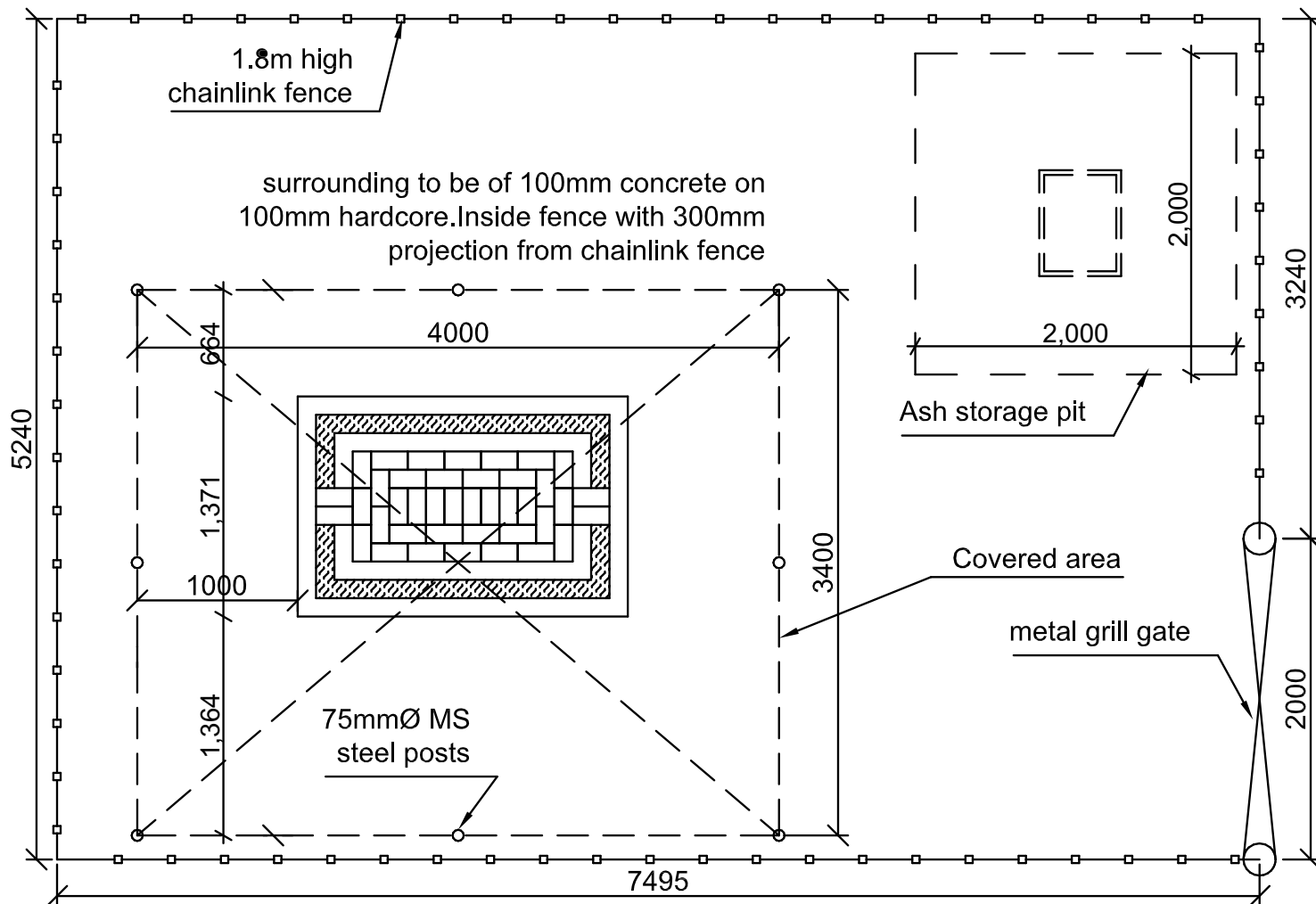
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**SITE LAYOUT
CHAIN LINK FENCE**

NOTES

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REPUBLIC OF UGANDA
MINISTRY OF HEALTH

IMPROVEMENT OF HEALTH CARE WASTE MANAGEMENT
IN UGANDA

INCINERATOR (MARK 3) DESIGN DRAWINGS

GENERAL VIEW
SITE LAYOUT

DRAWING NO.

MOH/HCW/MK10.0



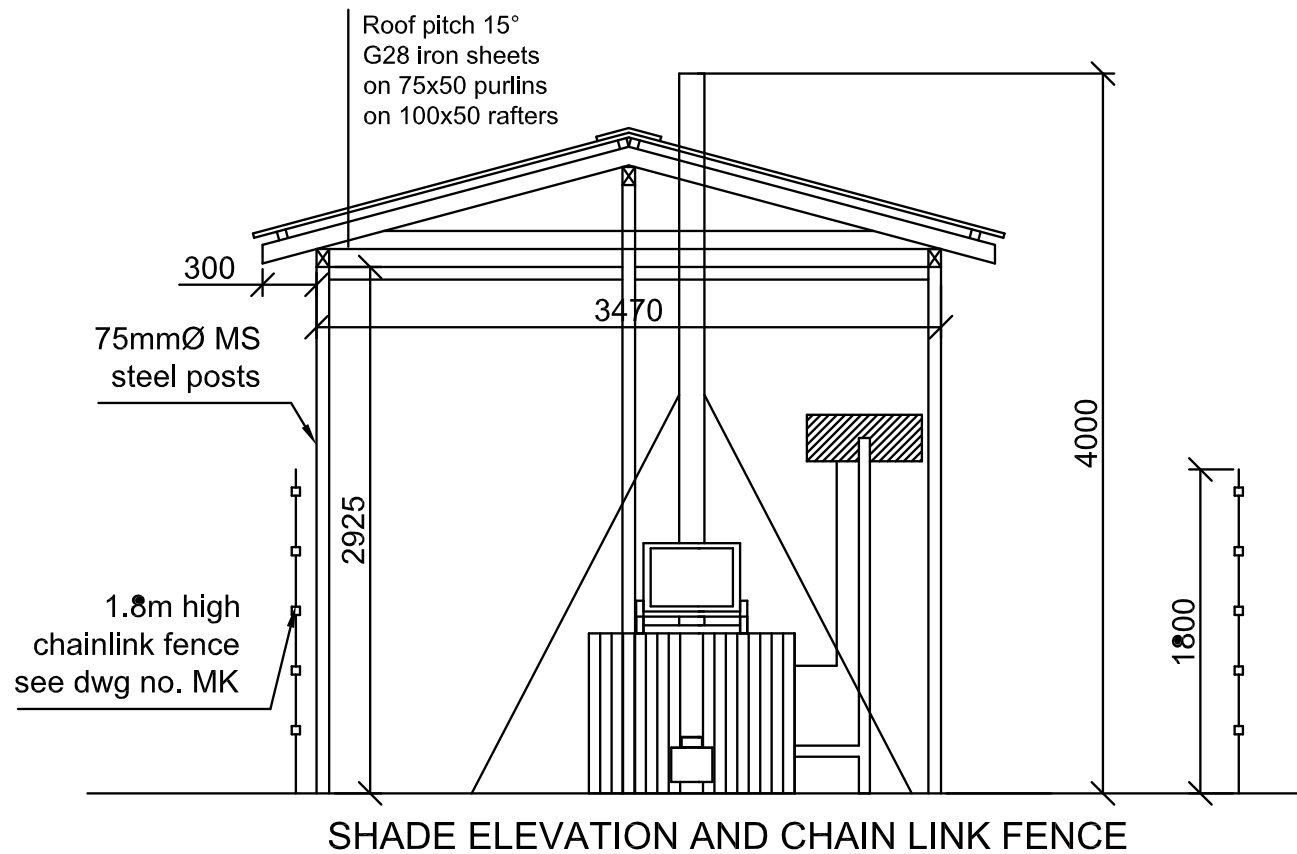
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Scale: 1:30

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INCINERATOR (MARK 3) DESIGN DRAWINGS

SHADE AND FENCING ELEVATION

DRAWING NO.
MOH/HCWMM/MK11



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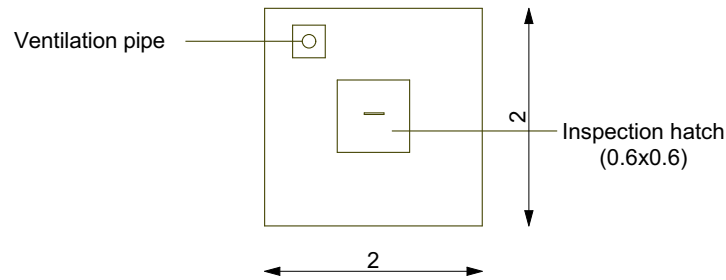
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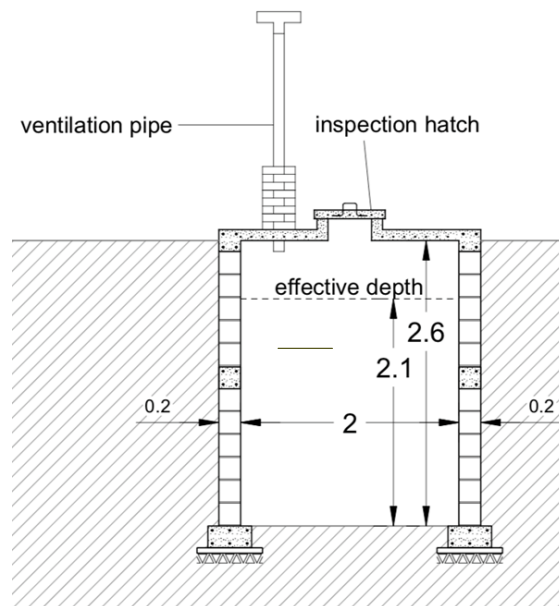
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8M³ Capacity Ash pit



PLAN



SECTION

NB: Units are in meters

Construction notes:

- To avoid collapse the pit is built with corner posts and reinforced concrete beam at half depth and at surface level.
- The pit walls are built with brick or cement block (depending on availability). In the bottom part of the lining the blocks are not sealed to allow fluids to percolate.
- The upper part of the liner (last 50cm below ground) should be sealed to avoid local water infiltration.
- The bottom of the pit should be left as such without liner to facilitate infiltration.
- The top of the pit should be closed off with a concrete slab to reduce the risk of attracting vectors such as flies, mosquitoes and rodents. The top slab should be above ground level and made of water-tight concrete to prevent surface water infiltration.
- The top should be closed by a lockable hatch and a vent pipe installed to ensure that the generated gases can escape and air can get in.
- Basic skills required for construction/installation: welder, mason
- Ventilation PVC pipe (*Pipe, No Pressure, Meter, Rigid, 4 in Nominal Pipe, PVC, Glue End Connection*), can be either 80 mm, 100 mm or 110 mm of External Diameter according to availability of material.
- Reinforced concrete used for upper slab, including inspection hatche (concrete 350 kg/m³).
- Concrete used for upper ring.

Safety requirements

- Where soil is particularly sandy, extra precautions may need to be taken to protect the water table and to prevent the pit from collapsing: the sides may be reinforced with bricks, laid with gaps between them so that the liquids can still escape.
- For worker safety during construction, avoid digging too deep holes: in unstable soil, consider use of temporary liner during construction.