

													موقوفات پیر و سرپرستی اہل سنت
													نہج و خیر، حقوق خیر و خیرات
													نہج خیر و خیرات
													نہج خیر و سرپرستی اہل سنت
													نہج خیر و خیرات، خیرات

نوٹ: یہ فہرست خیرات و خیرات کے ناموں پر مشتمل ہے۔

31 3010-3 99

BILL OF QUANTITIES FOR CONSTRUCTION OF A WASTE BURNER IN GA. DHAANDHOO

No	Item	Unit	Quantity	Rate	Amount
1	Preliminaries				
1.1	Mobilisation to site	LS	1		
1.2	Allow for all site clean up work including relocation of existing waste to a temporary location identified by island council	LS	1		
2	Earth Works				
2.1	Ground levelling works for ground slabs	m2	1.94		
2.2	Wall Footings	m3	5.16		
2.3	Flood light pole	m3	0.06		
2.4	Setting up a ground water well in the location shown	LS	1		
3	Concrete Works				
3.1	Concrete ground slab works for burner as shown in the drawing. Include the cost of all formwork, reinforcements, and providing HDPE membrane below slab	m3	1.94		
3.2	Concrete ground slab works fan stand as detailed in the drawing. Include the cost of all formwork, reinforcements, and providing HDPE membrane below slab	m3	0.05		
3.3	Provide 100mm concrete floor screed for collection bay area according to the slope shown in drawing. Reinforcement for the slab shall be R6@150 BW single layer	m3	3.00		
3.4	Wall footings as detailed in the drawing	m3	1.85		
3.5	Wall ground beam as detailed in the drawing	m3	1.23		
3.6	Wall columns as detailed in the drawing	m3	1.17		
3.7	Foundation for Flood light as detailed in the drawing	m3	0.14		
3.8	Ground water well casting work	LS	1		
3.9	Ground water well top casting work	LS	1		
4	Roofing Works				
4.1	Lysaght roofing sheet for collection bay area. Rate shall include all necessary laps, fastening, fixtures and sealing of joints	m2	33.00		
4.2	Roof flashing. Rate shall include fastening and sealing of joints	m	108.90		
4.3	Timber beams - 150 x 75mm. Rate shall include for all fixing and joints.	m	30.00		
4.4	Timber rafters - 100 x 50mm. Rate shall include for all fixing and joints	m	11.11		
4.5	Timber battens - 50 x 38mm. Rate shall include for all fixing and joints.	m	16.67		
5	Masonry Works of the Collection Bay				
5.1	3000mm high masonry walls	m3	178.35		
6	Plastering Works of the Collection Bay				
6.1	25mm plastering on 3000mm high masonry walls	m3	56.55		
7	Painting Works of the Collection Bay				

7.1	Apply emulsion paint coating on 3000mm high walls	m2	305.30		
7.2	Apply emulsion paint coating on flood light pole	LS	1		
7.3	Apply paint coating on the two metal folding door	LS	1		
7.4	Apply emulsion paint coating on G.I members and MS Sheets of gates	LS	1		
8	Steel works. Rate shall include all associated cutting, bending and welding works.				
Main Body of Burner					
8.1	10mm Base plate (200mm wide) and bolting base plate to ground slab using 10mm bolts	m2	2.24		
8.2	6mm MS sheet for main chamber	m2	35.84		
8.3	6mm MS sheet for frustum	m2	9.11		
8.4	6mm MS sheet for stack	m2	14.13		
8.5	Construction of a metal cap for the top of the burner as shown in the drawing. Rates shall include all necessary welding, frames and seals.	LS	1		
Main Body Frames					
8.6	Welding of 50mm dia ring pipe for frustum frame with intermediate support members of 50mm dia as shown in the drawing.	m	23.98		
8.7	Welding of 50mm dia ring pipe for main chamber frame as shown in the drawing.	m	38.40		
8.8	Welding of 50mm dia ring pipe for support frame of fire bricks at top of the main chamber as shown in the drawing.	m	24.14		
8.9	16mm non deformed bars welded to the top of the support frame of fire bricks at the top of the main chamber as shown in the drawing.	m2	9.51		
Doors and Openings					
8.10	Fixing charging / discharging door of dimensions 1000 x 1000mm at a height of 800mm from bottom of burner. Rate shall include 50mm diameter frame pipe around opening and high temperature air-tight seal	Nos	1		
8.11	Construction of metal sliding hatch doors that slide up and down. Each door should be 700 x 150 mm at a height 300mm from the bottom of the burner. Rates shall include all necessary frames and seals	Nos	4		
Combustion Net and Frames					
8.12	50 x 50 x 6 Equal Angle for combustion net frame as specified in the drawing.	m	24.32		
8.13	16mm non deformed bars at 100mm c/c BW for combustion net as specified in the drawing.	m2	7.06		
Ash Collection					
8.14	Construction of pull out trays for collecting ash from 3mm MS Sheet with dimensions 1700 x 1190 x 200mm with handles made out of 10mm dia ring pipe and four wheels along each side of the length of the tray as specified. Rates shall include all necessary welding, frames and seals	Nos	2		

8.15	Construction of pull out trays for collecting ash from 3mm MS Sheet with dimensions 1145 x 1190 x 200mm with handles made out of 10mm dia ring pipe and three wheels along each side of the length of the tray as specified. Rates shall include all necessary welding, frames and seals	Nos	2		
8.16	Construction of slopes using 3mm MS Sheet for the four corners of the ash collection trays as specified in the drawing. Rates shall include all necessary welding, frames and seals	LS	1		
Axial Fan Ducts and Cover					
8.17	Fabricate and install 300mm diameter ducts from fan to main chamber and stack using 3mm MS Sheet and 25mm Dia G.I Pipe Welded at the 4 quadrants of the Duct as specified in the drawings. Rates shall include all G.I Clips, G.I pipes, welding, frames and seals.	LS	1		
8.18	Provide cover for axial fan using 3mm MS Sheet and 25mm dia G.I. pipes as specified. Rates shall include all welding, frames and seals.	LS	1		
Flood light pole					
8.19	Provide 75mm G.I pipe as flood light fixing poles. Rate shall include installation charges as shown on drawing.	Nos	1		
9	Construction of fire wall using fire bricks that can withstand heat of atleast 400 Degree Celsius around the main chamber and at the top of the main chamber as indicated in the drawing	LS	1		
10	Applying refractory lining on top of ground slab of the burner	LS	1		
11	Marine Grade High temperature paint on all steel members of the burner including ring pipes for support frames (Paint that can withstand heat of atleast 400 Degree Celsius)	LS	1		
12	Electrical Works and Accessories				
12.1	Supply and install 550w, 3000 rpm, 300mm diameter axial flow fan for blowing air into the main chamber and stack.	Nos	1		
12.2	Provide a waterproof switch for the fan near the distribution box.	Nos	1		
12.3	Connection of the fan to circuit breaker using 10sqmm power supply cable and all necessary accessories	LS	1		
12.4	Provide 200 W flood light for illuminating the waste yard.	Nos	1		
12.5	Provide and install a waterproof switch for the flood light near the distribution box.	Nos	1		
12.6	Connection of the flood light to circuit breaker using power supply cable and all necessary accessories	LS	1		
12.7	Supply and fix electric meter, 4 pole MCCB, Single Phase distribution board and 3 Phase distribution board as shown on drawing. Earth link and connection to earth rod with proper earth pit should be provided as well. The Distribution board should have an adequate waterproof cover	LS	1		
12.8	Provide 25 sqmm 4 core power supply cable from nearest distribution box to the distribution box in the collection bay area	m	200		
12.9	Provide 13 A power socket near the well water pump	Nos	1		

12.10	Provide and install a waterproof switch for the well water pump near the distribution box.	Nos	1		
12.11	Connection of the well water pump to circuit breaker using power supply cable and all necessary accessories	LS	1		
12.12	Provide well water pump. Rate shall include its fixing inside the Pump House	Nos	1		
13	Plumbing Works				
13.1	Provide connection from pump to ground water well. Rate shall include all necessary pipes, bends, fittings and footvalve and others as maybe required.	LS	1		
13.2	Provide outlet pipes as shown on drawing. Rate shall include connection to pump, bends, fittings and others as maybe necessary.	LS	1		
13.3	Provide PVC taps at ends of outlet pipes.	Nos	2		
13.4	Supply 25mm diameter flexible hose	m	25.00		
14	Other Works				
14.1	Provide lockable metal gates for entrance to waste yard as specified in the drawing. Rate shall include all cuts, welds, applying protective coating to welded joints, painting the frame and properly fixing the door to the fence.	Nos	1.00		
15	Demobilization Works				
15.1	Clean up site upon completion of works	LS	1		
15.2	Demobilization	LS	1		

Sub total

GST 6%

Grand total

4: دسہ ہزار روپے کی قیمت پر

BILL OF QUANTITIES FOR CONSTRUCTION OF A WASTE BURNER IN GA. DHAANDHOO
Summary Sheet

No	Item	Amount
1	Preliminaries	
2	Earth Works	
3	Concrete Works	
4	Roofing Works	
5	Masonry Works of the Collection Bay	
6	Plastering Works of the Collection Bay	
7	Painting Works of the Collection Bay	
8	Steel works	
9	Construction of fire wall using fire bricks	
10	Applying refractory lining on top of ground slab of the burner	
11	Marine Grade High temperature paint on all steel members of the burner	
12	Electrical Works and Accessories	
13	Plumbing Works	
14	Other Works	
15	Demobilization Works	

Sub total

GST 6%

Grand total

مَجْرُوعُو 2 : دَسْرَتَاغَرِ دِي نَمْرَدَسْرُو



PROJECT:

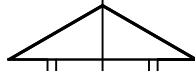
**CONSTRUCTION OF WASTE BURNER
AT GA. DHAANDHOO**

PREPARED BY:

WASTE MANAGEMENT AND POLLUTION CONTROL DEPARTMENT
MINISTRY OF ENVIRONMENT AND ENERGY

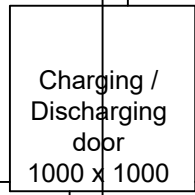
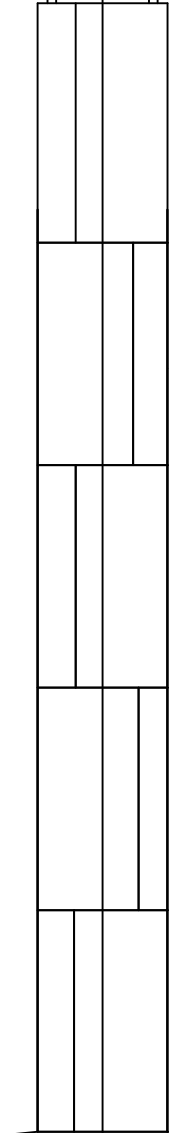
JULY 2017

SECTION AA



Exterior and interior surface painted using marine grade high temperature paint

Exterior and interior surface painted using marine grade high temperature paint

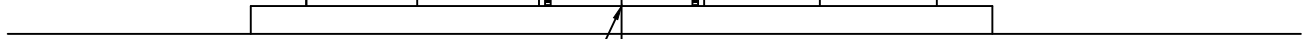


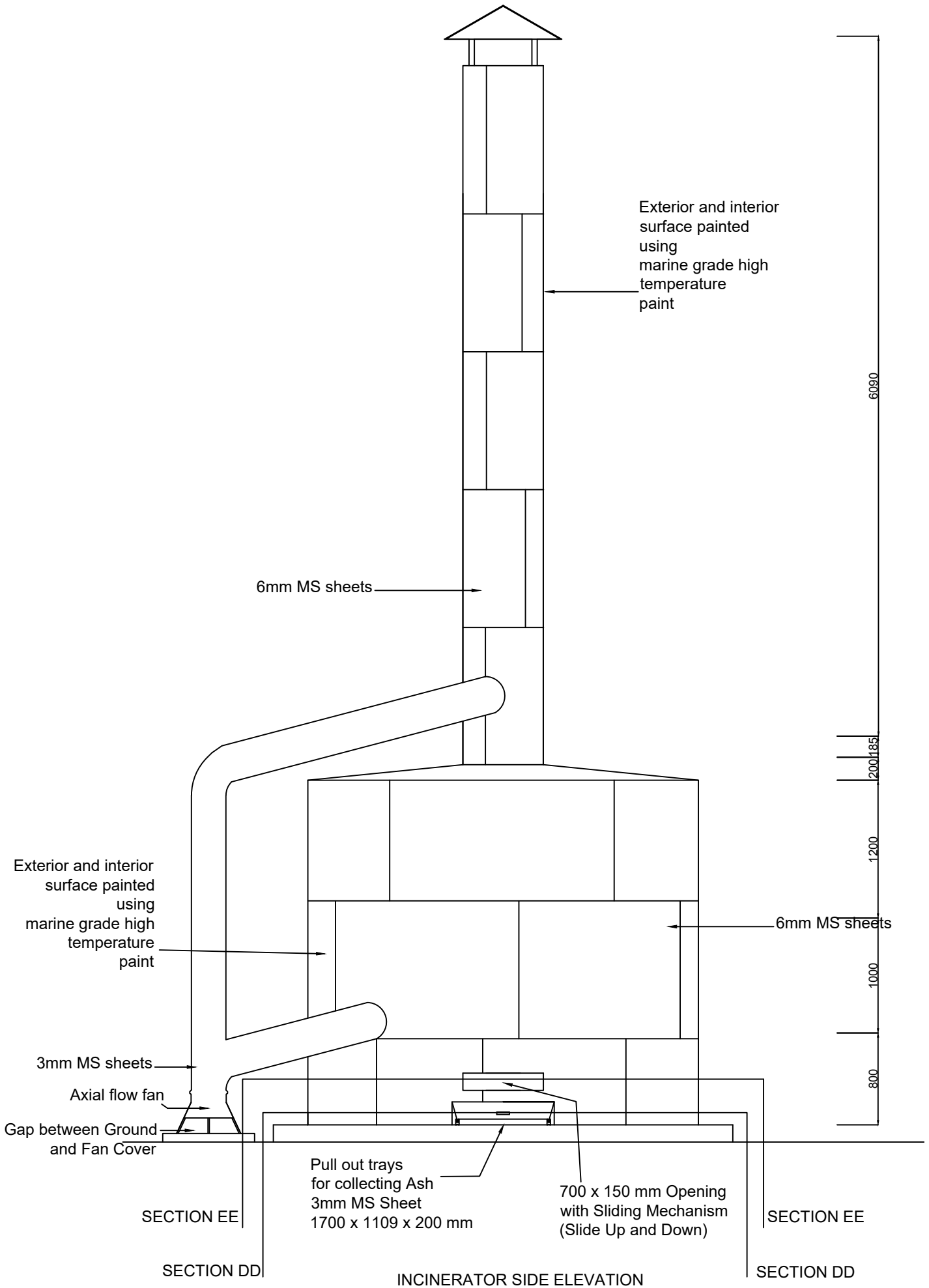
700 x 150 mm Opening with Sliding Mechanism (Slide Sideways) 300mm from the bottom of the incinerator

Pull out trays for collecting Ash
3mm MS Sheet
1700 x 1190 x 200 mm

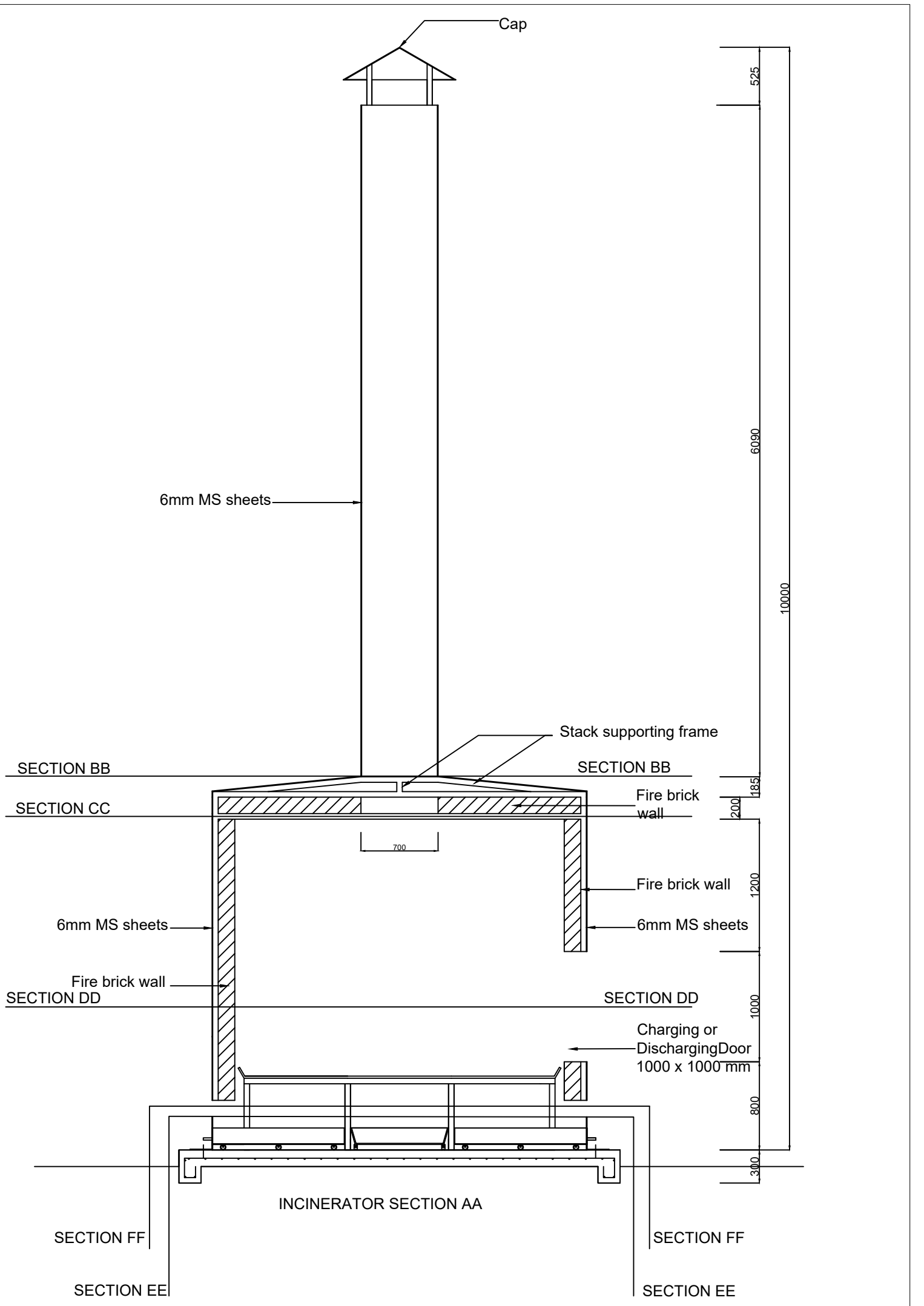
Pull out trays for collecting Ash
3mm MS Sheet
1145 x 1109 x 200 mm

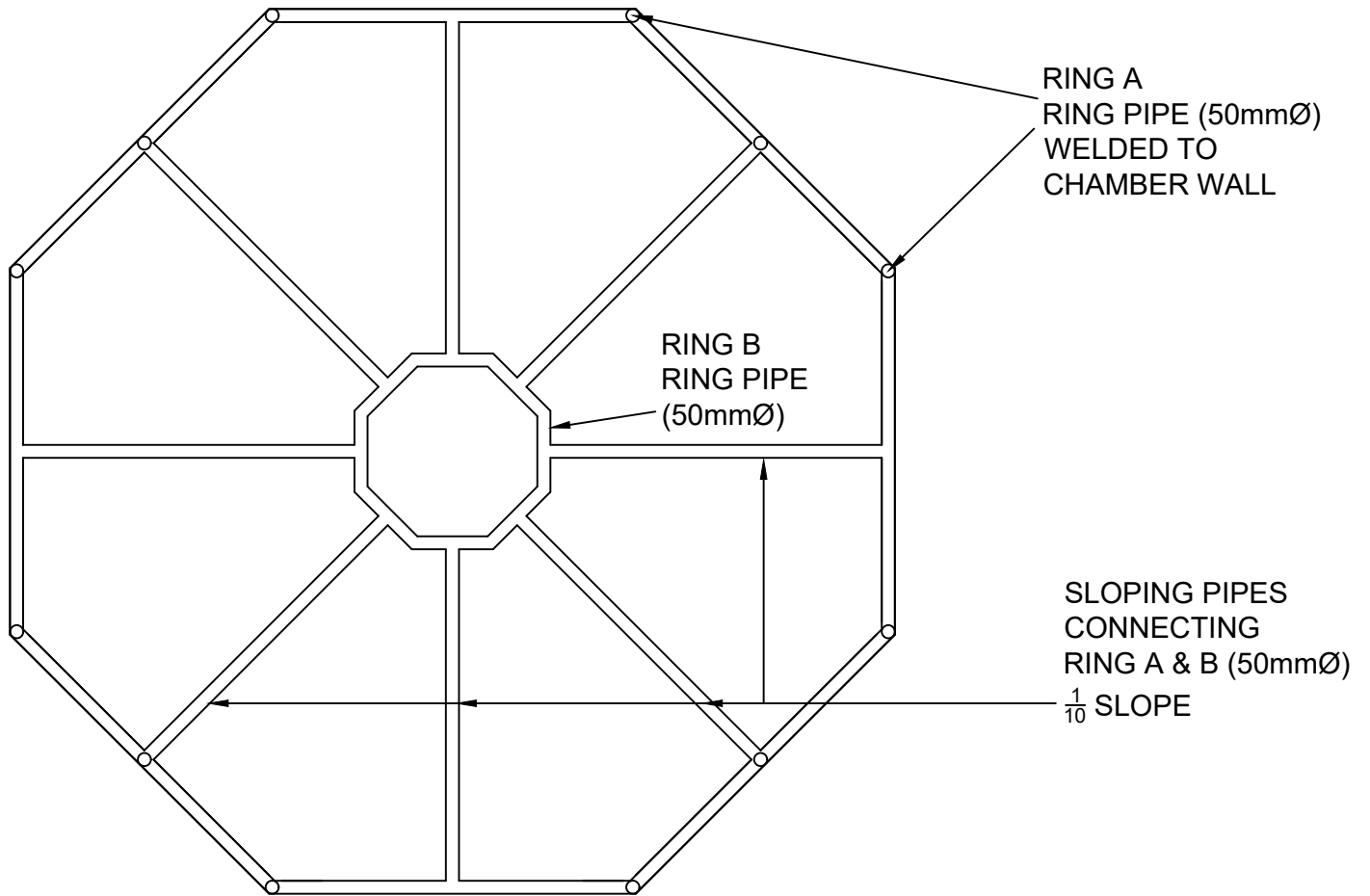
SECTION AA



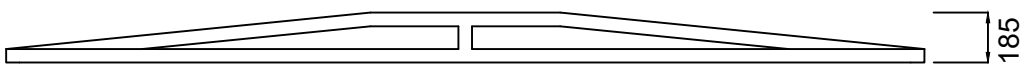


INCINERATOR SIDE ELEVATION

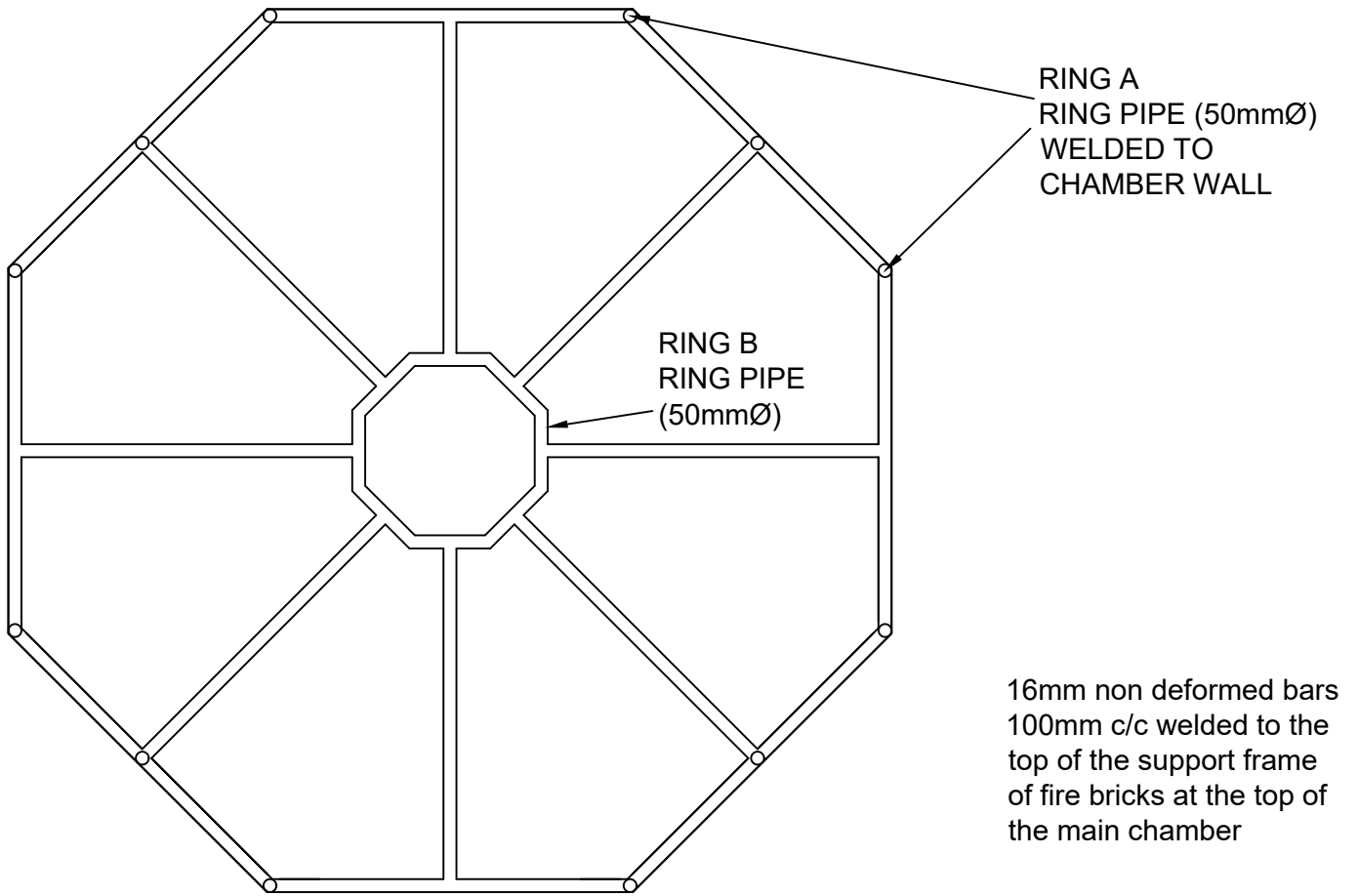




PLAN OF INCINERATOR SECTION BB
STACK SUPPORTING FRAME



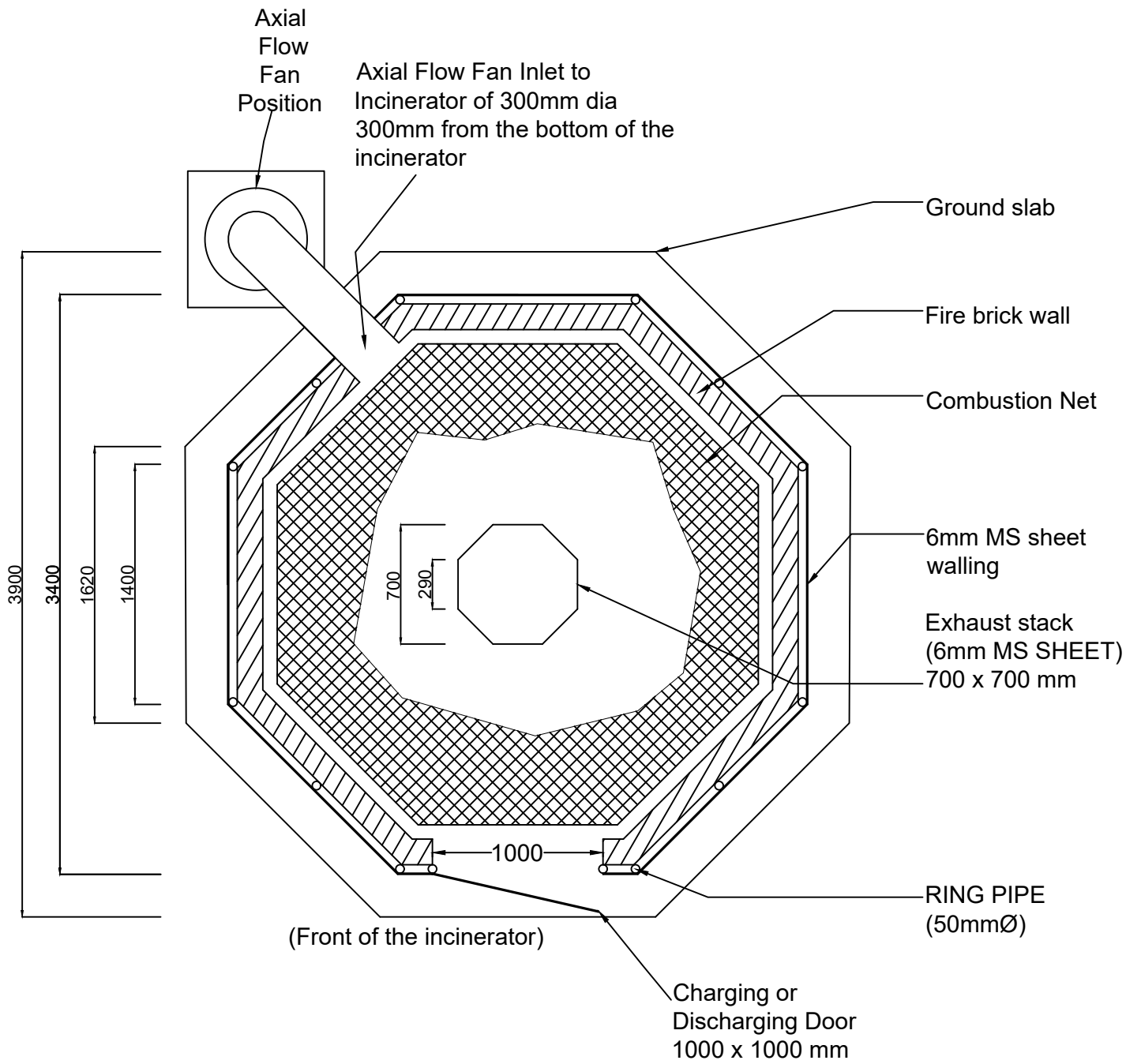
ELEVATION OF INCINERATOR SECTION BB
STACK SUPPORTING FRAME



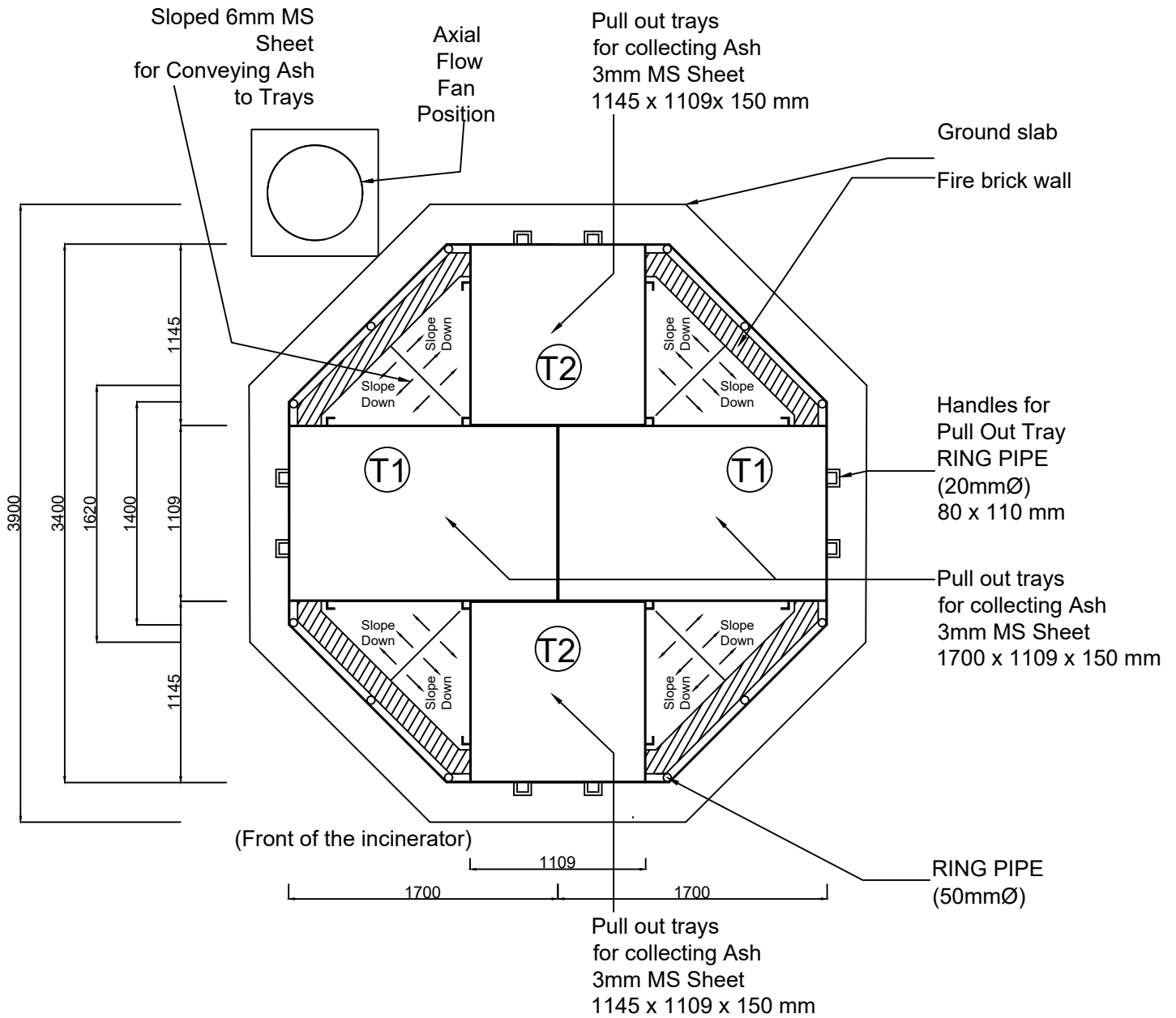
PLAN OF INCINERATOR SECTION CC
MAIN CHAMBER TOP FIRE BRICKS SUPPORTING FRAME



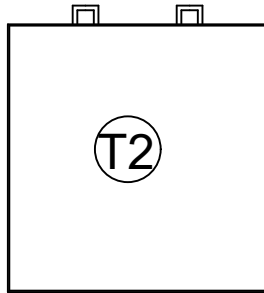
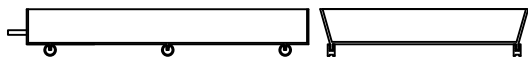
ELEVATION OF INCINERATOR SECTION CC
MAIN CHAMBER TOP FIRE BRICKS SUPPORTING FRAME



INCINERATOR SECTION DD

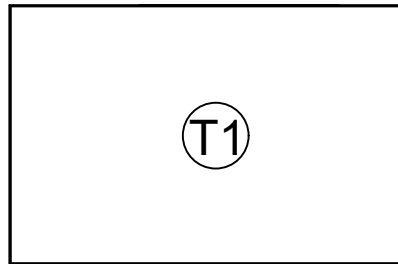
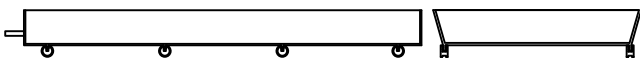


INCINERATOR SECTION EE
 ASH COLLECTION



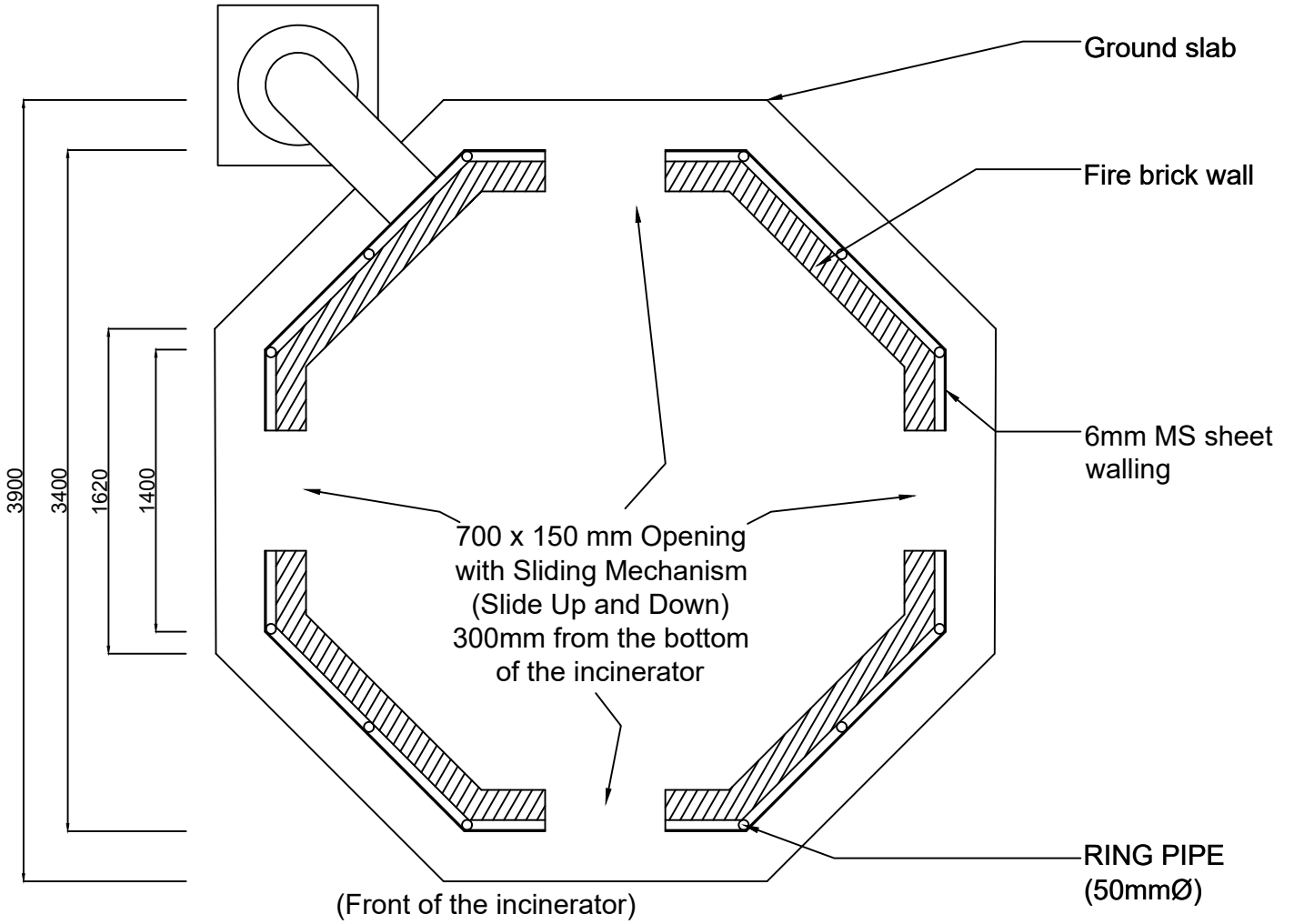
TRAY 2

*Pull out trays
for collecting Ash
3mm MS Sheet
1145 x 1109x 150 mm
*Three wheels along
length of two sides

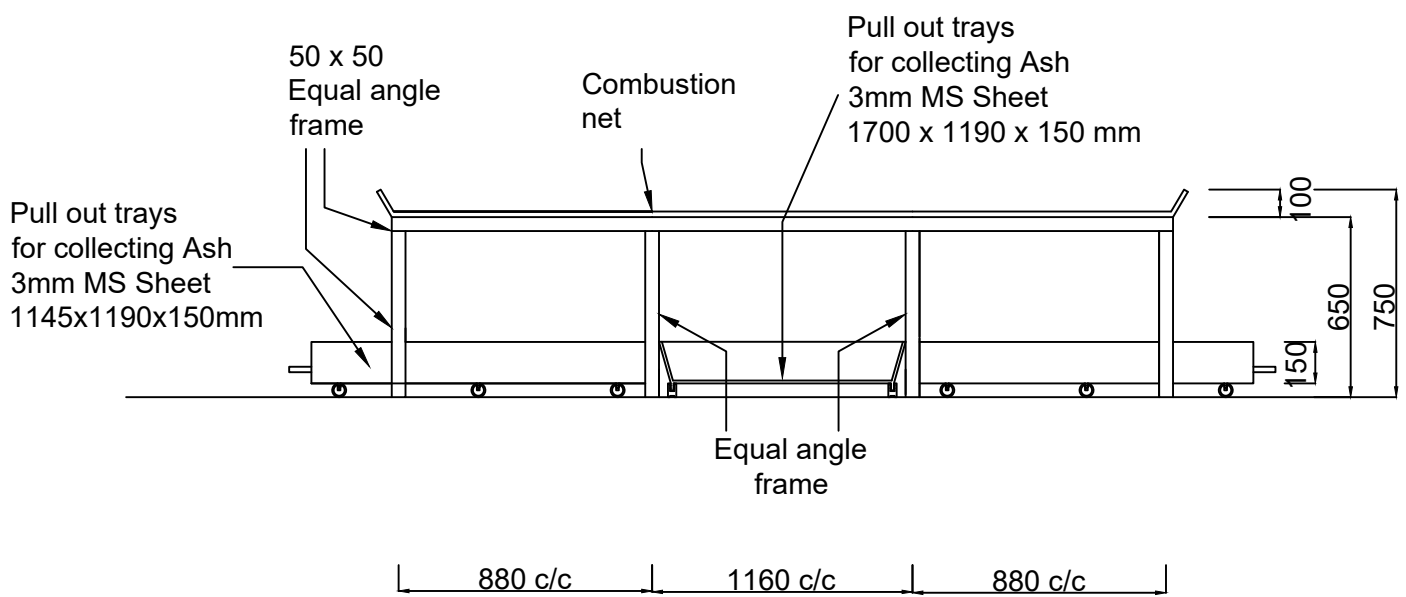


TRAY 1

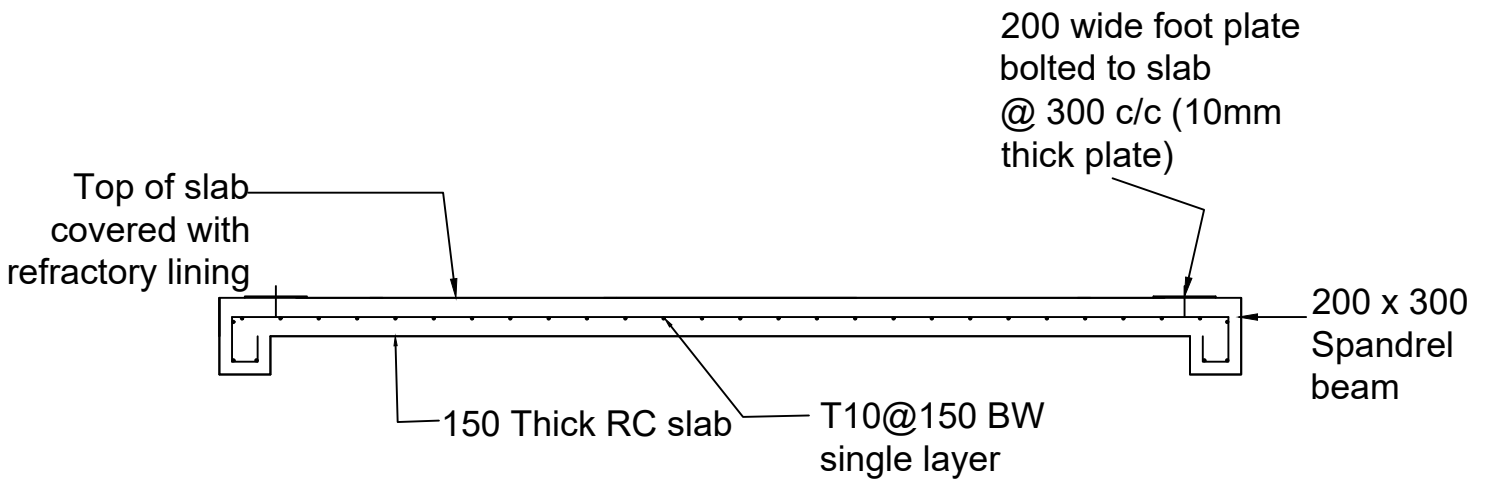
*Pull out trays
for collecting Ash
3mm MS Sheet
1700 x 1109 x 150 mm
*Four wheels along
length of two sides



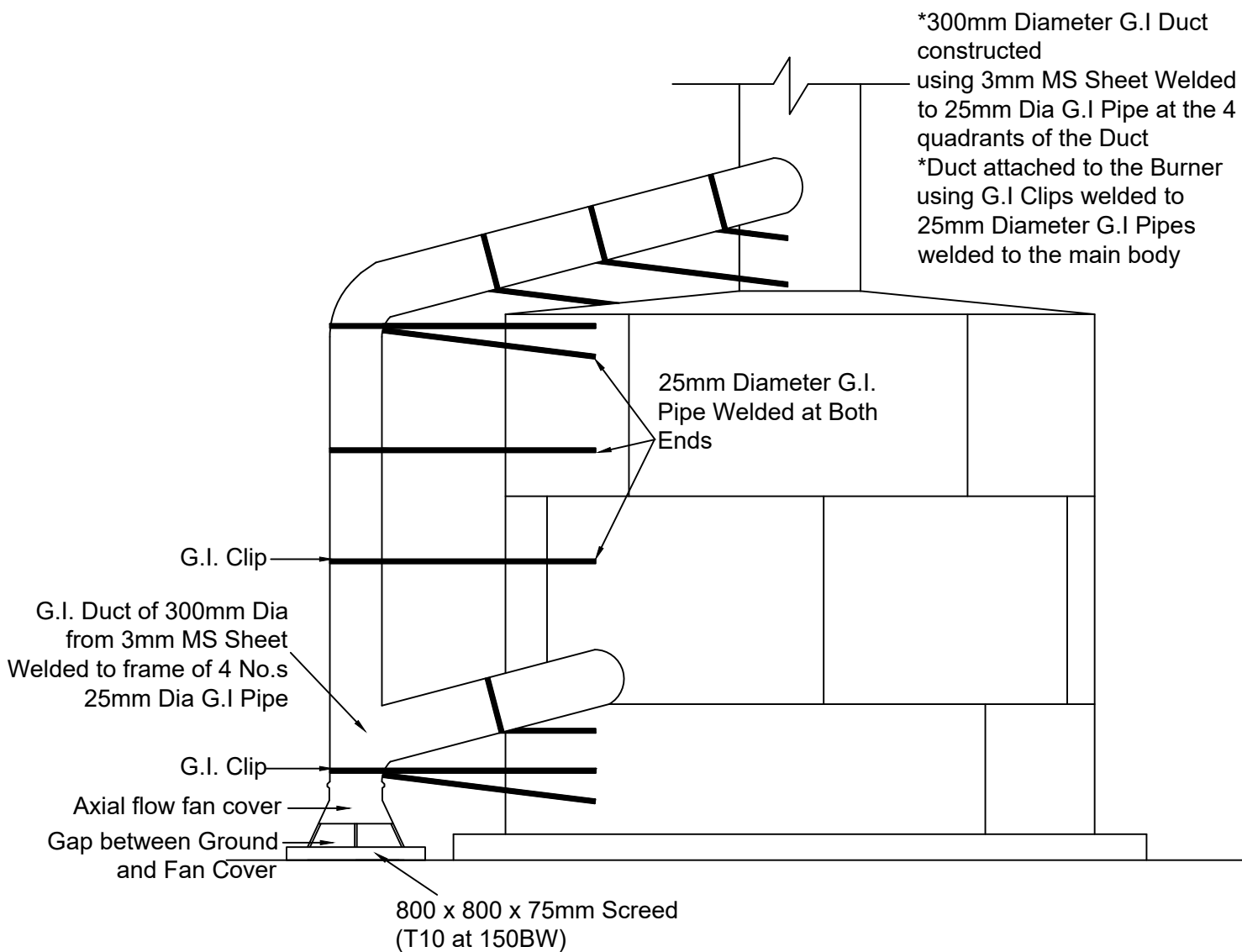
INCINERATOR SECTION FF
SLIDING OPENINGS



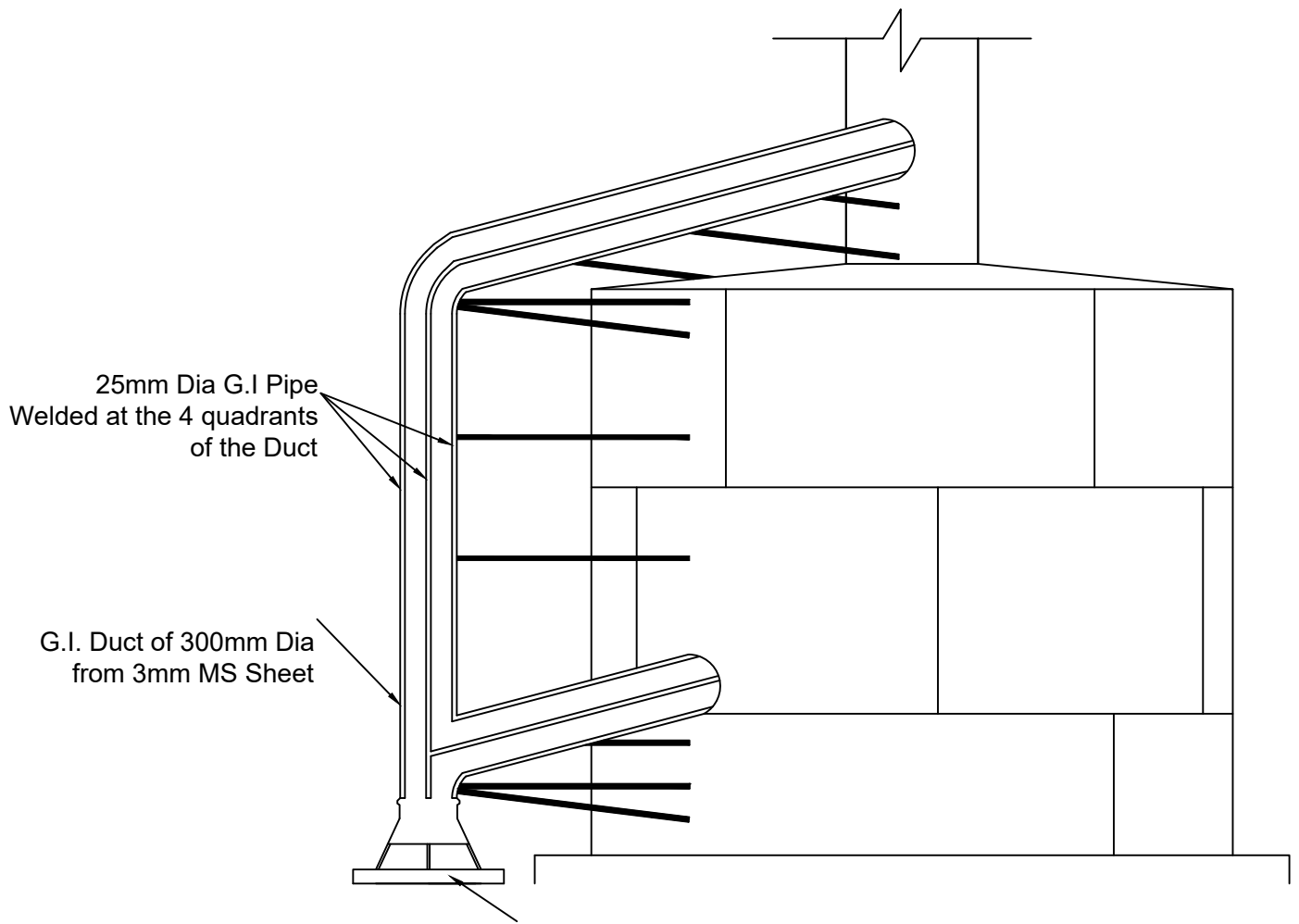
**INCINERATOR COMBUSTION NET SUPPORT
 FRAME AND ASH COLLECTION SECTION**
 (From the front of the incinerator)



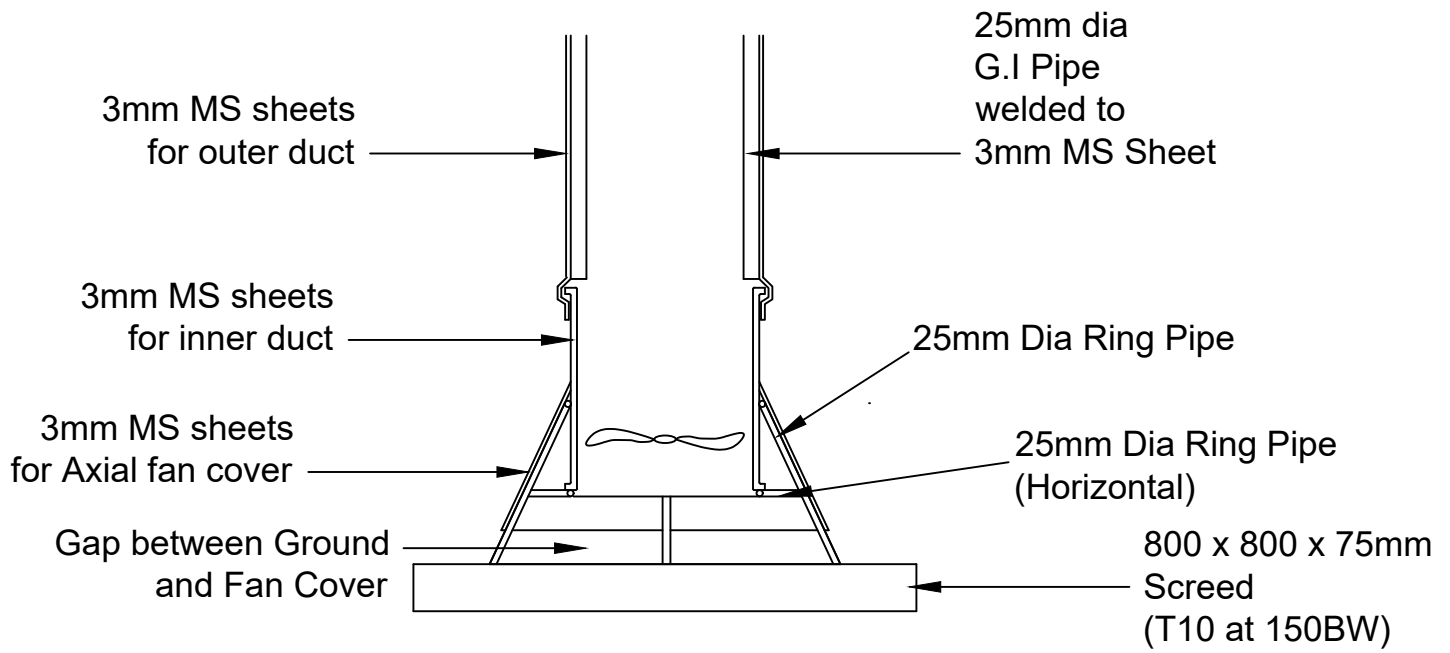
INCINERATOR CONCRETE SLAB



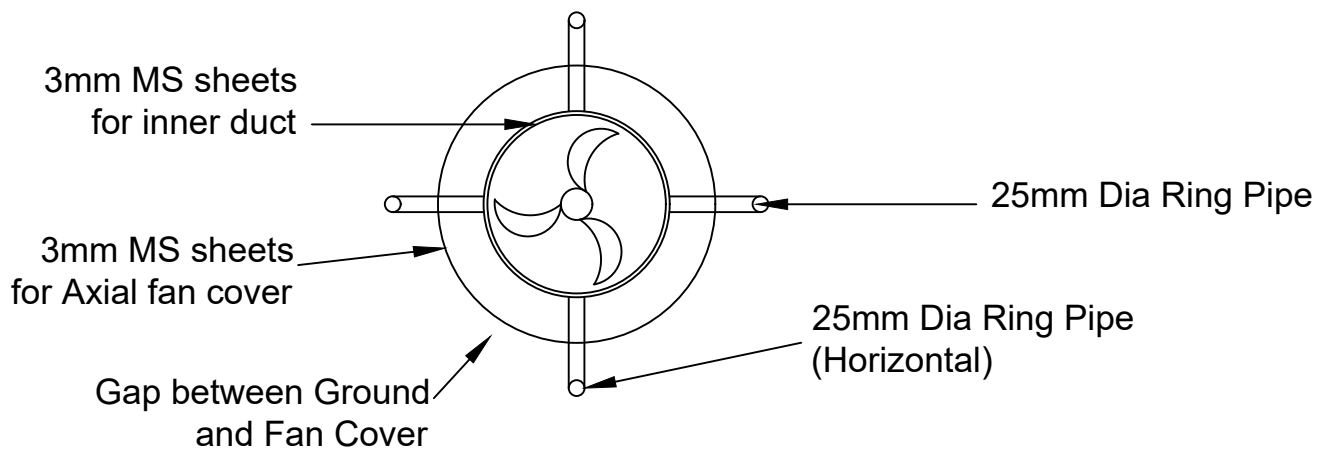
FAN DUCT DETAILS



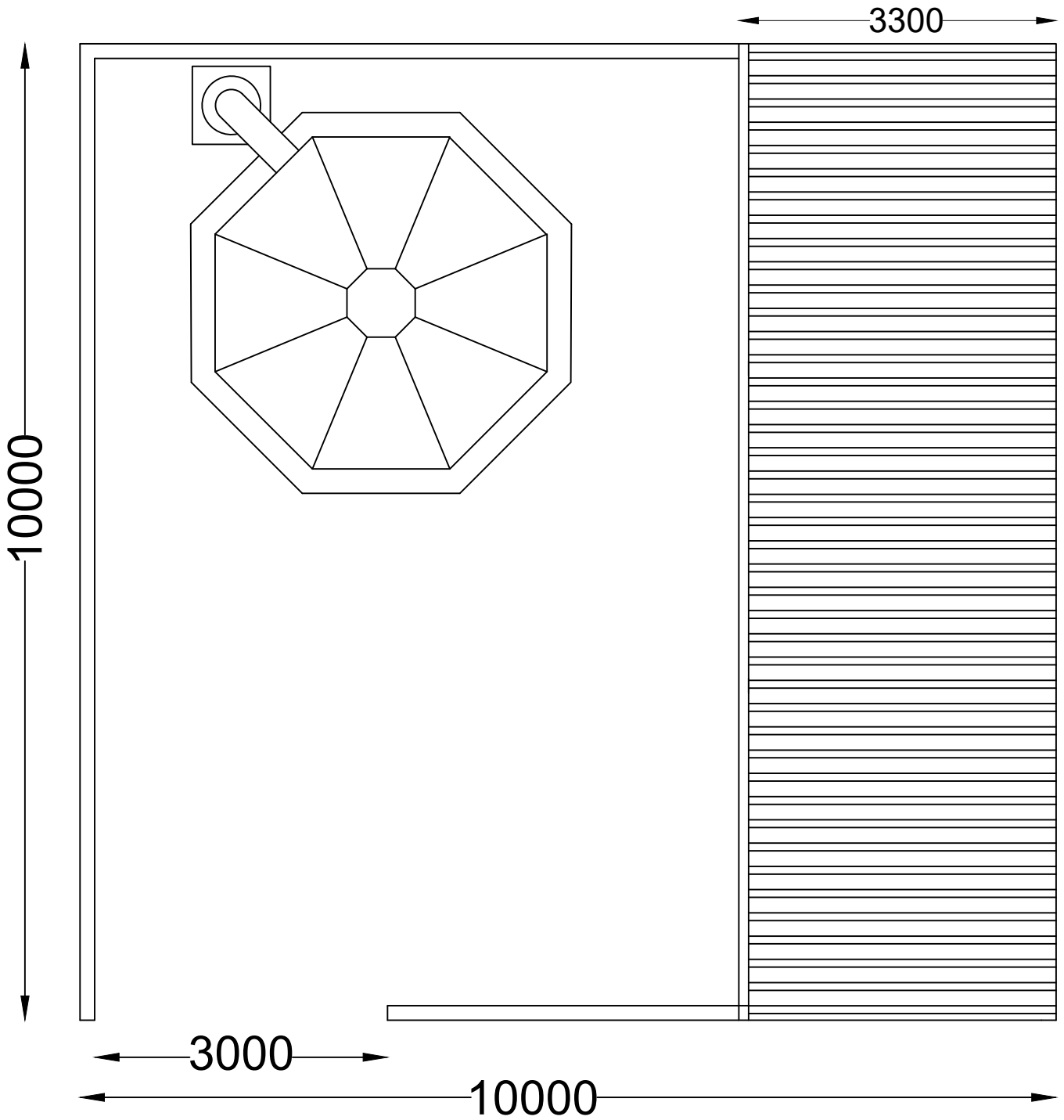
FAN DUCT SECTION



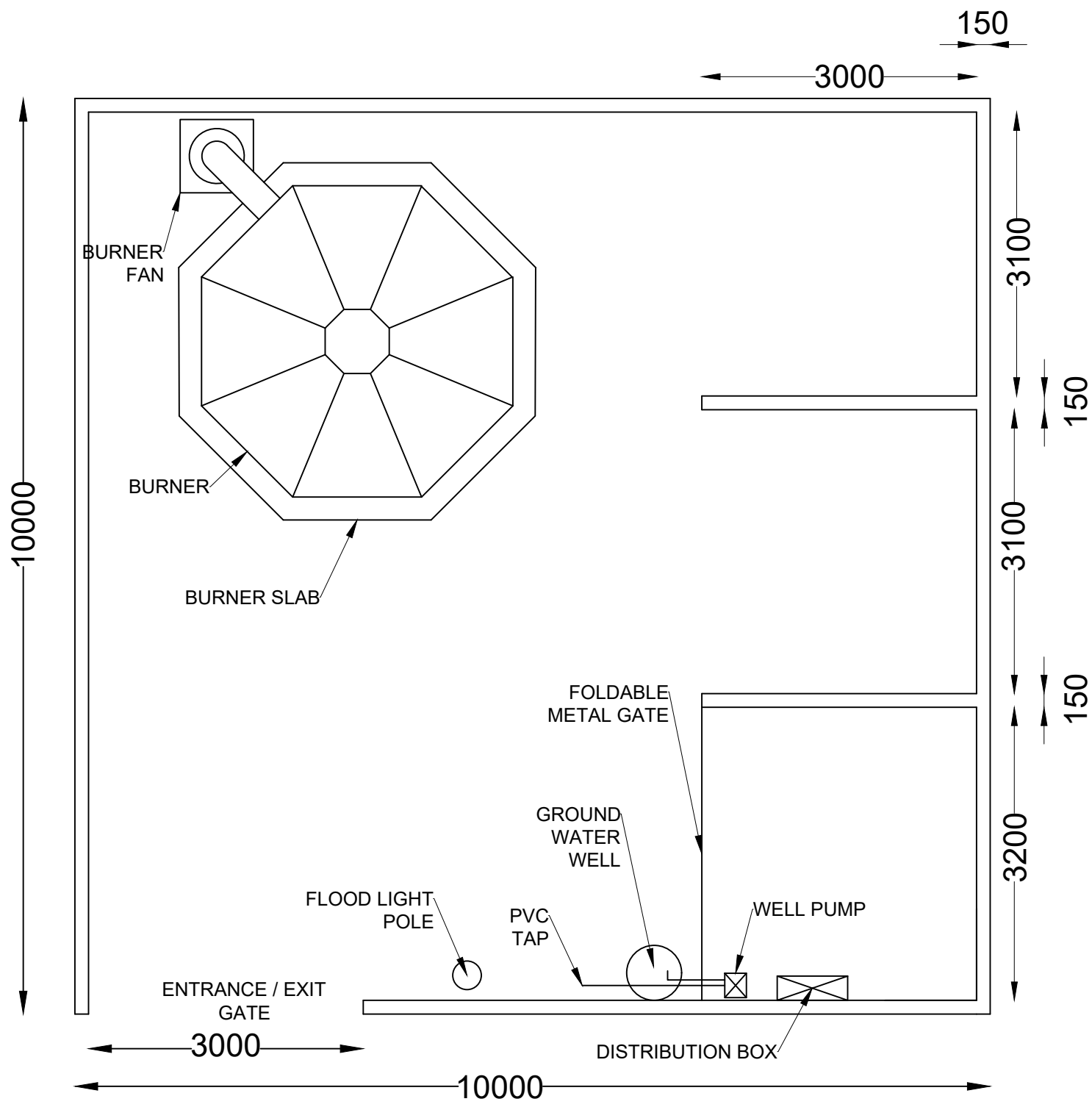
AXIAL FLOW FAN SIDE ELEVATION



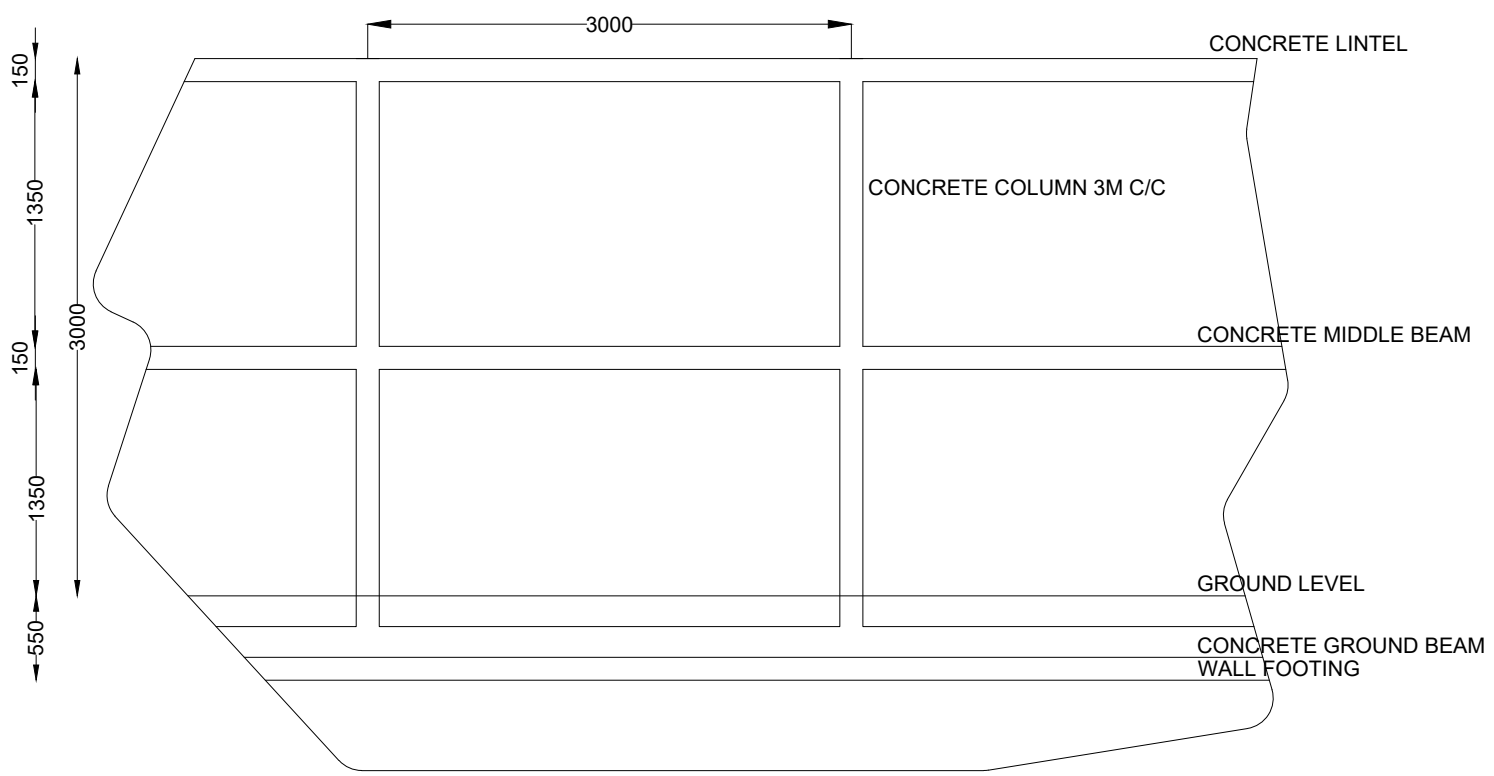
AXIAL FLOW FAN HOUSING TOP VIEW



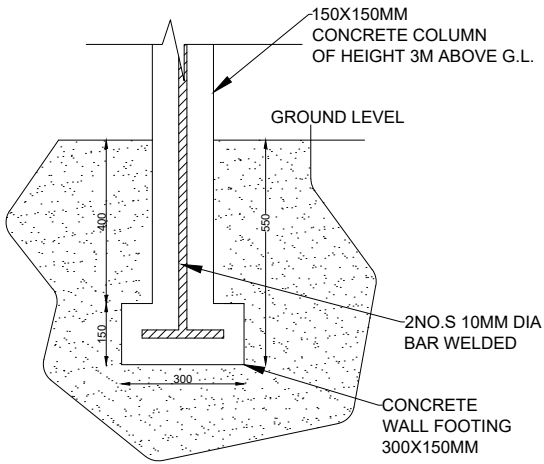
WASTE YARD LAYOUT



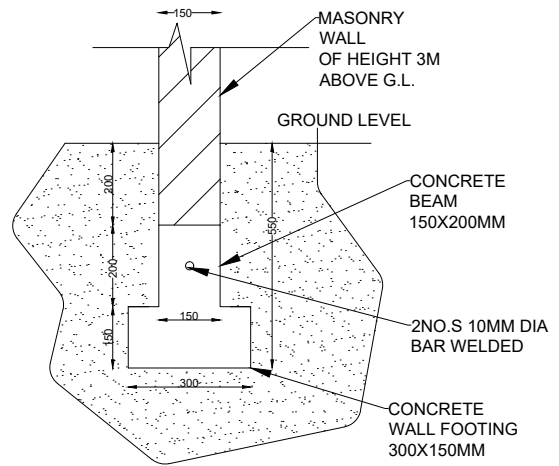
WASTE YARD LAYOUT DETAILS



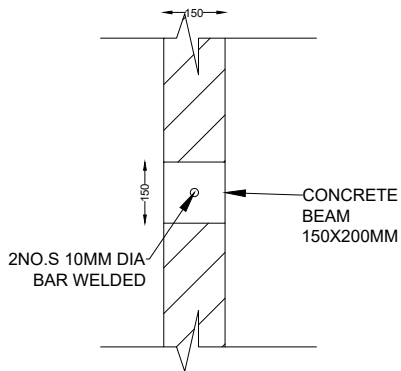
COLLECTION BAY - WALLS



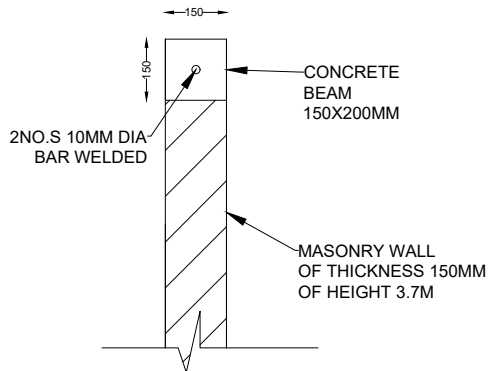
COLUMN DETAILS



BEAM AND WALL FOOTING DETAILS

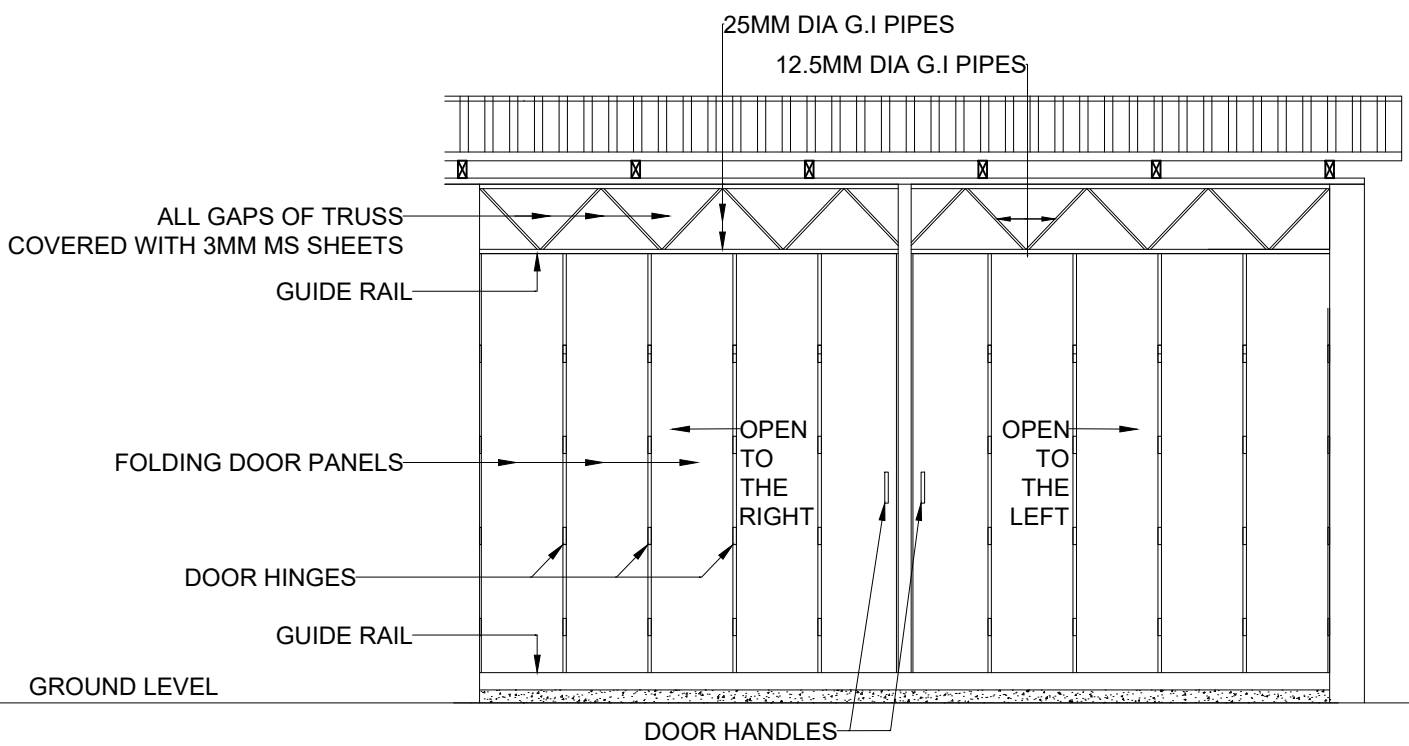


MIDDLE BEAM DETAILS



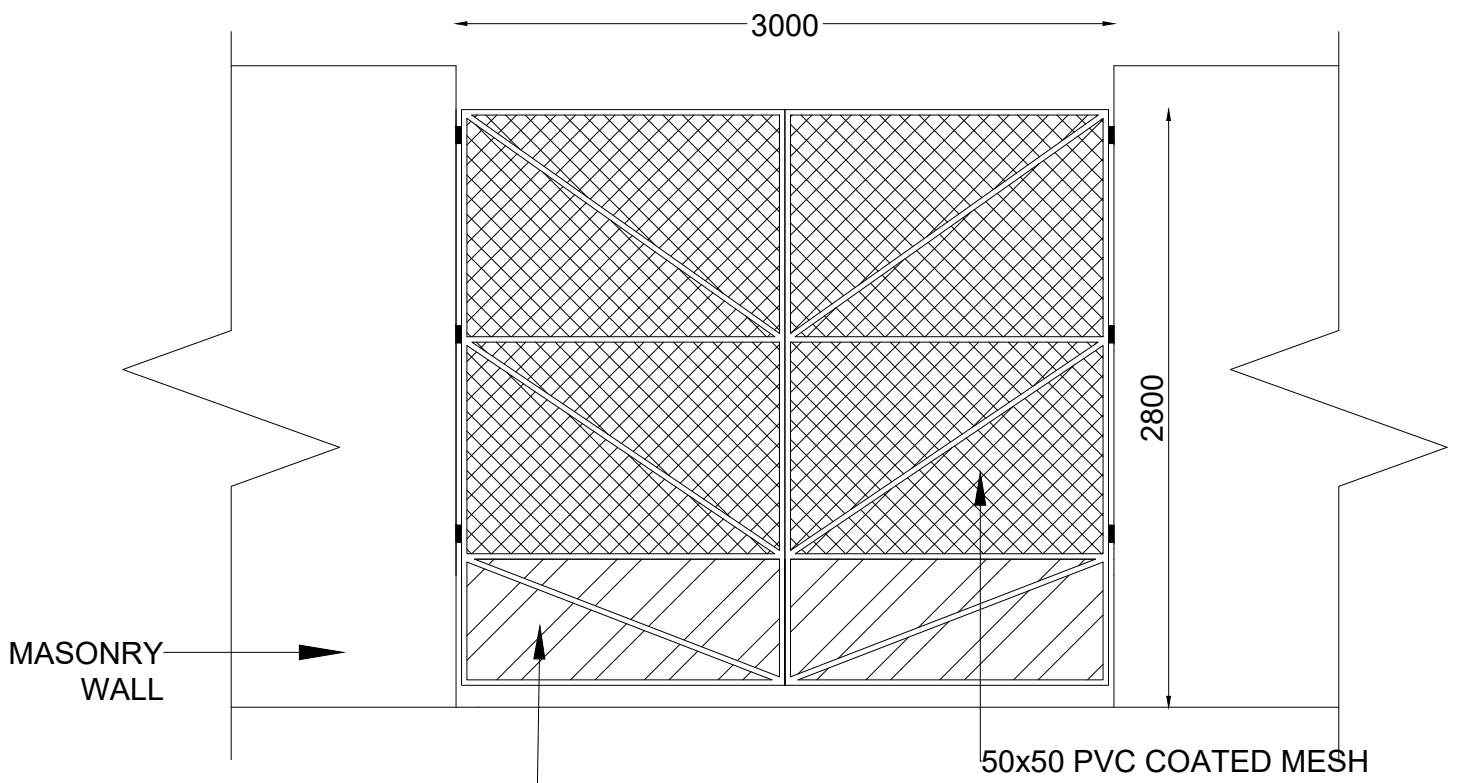
LINTEL DETAILS

COLLECTION BAY - WALL DETAILS



NOTE: ALL WELDS FOR TRUSS MEMBERS ARE 5MM FILLET WELDS

COLLECTION BAY - FOLDING DOOR DETAILS



MASONRY
WALL

3000

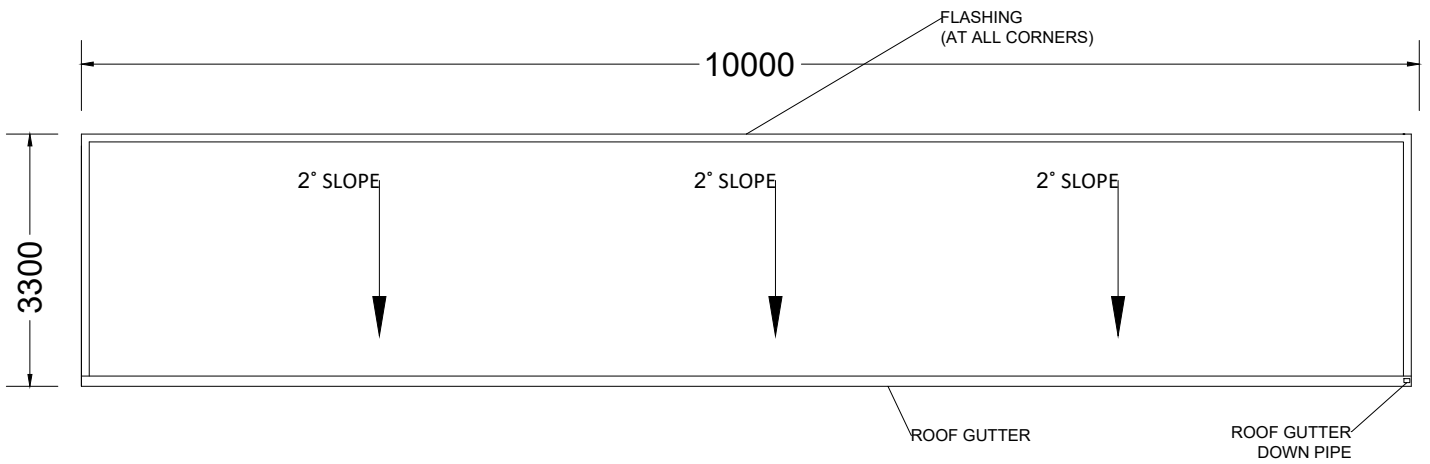
2800

3MM MS SHEET
COATED WITH PAINT

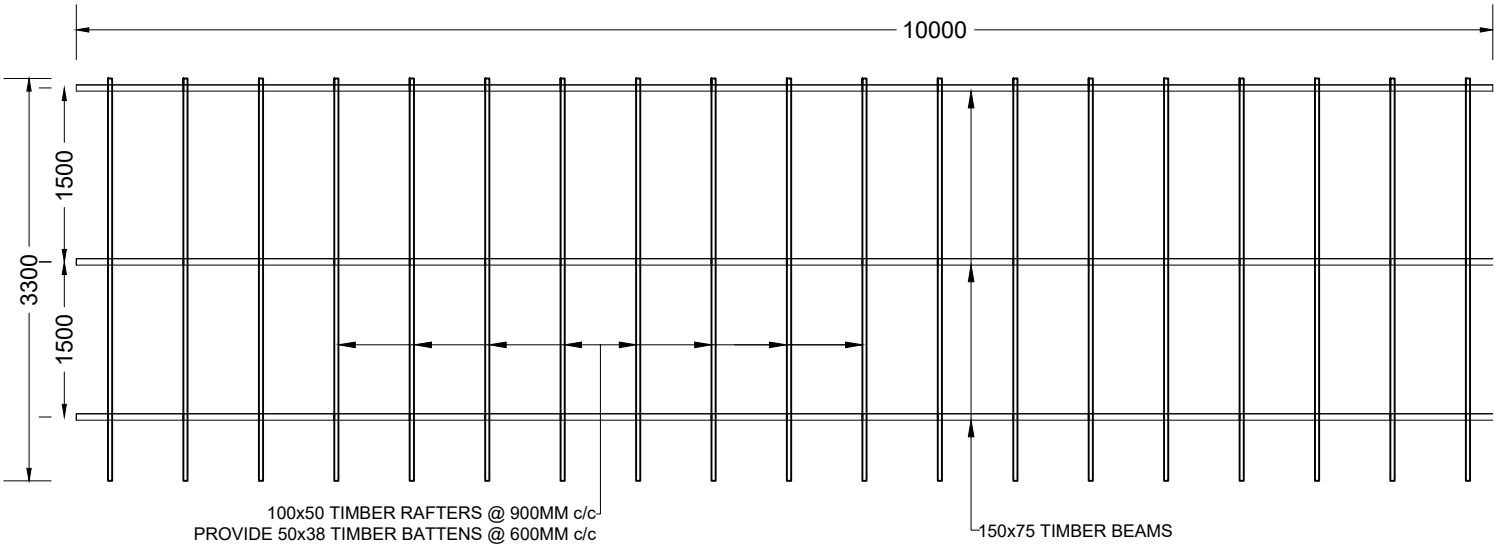
50x50 PVC COATED MESH

NOTE:
 - DOOR IS MADE FROM 25MM DIA GI
 PIPE
 - ALL WELDS ARE 5MM FILLET WELDS
 AROUND MEMBER

DETAILS OF GATE FOR ENTRANCE TO WASTE YARD



ROOF PLAN



ROOF FRAMING

3 : دسره لاجوري صوبه " خاسراو سوسو " سوسو

Working Site

The site should be kept clean during the construction work period and should be thoroughly cleaned once the works are completed. Works should be carried out on site in a safe manner to all the workers on site and the people living in the vicinity of site. Disturbance to the neighborhood should be kept to a minimum. Electricity and water supply to the site, during construction period, should be provided by the contractor

Concrete

Cement conforming to BS12 standards should be used for all concrete, masonry and plastering works. The cement intended for use should be fresh and should not have any traces of hardened cement in the bag.

1. All concrete works should be done using one brand of cement
2. Sand and aggregate used for concrete works should be well graded.
3. Concrete should be mixed in the ratio 1:2:3 which are 1 part cement, 2 parts sand and 3 parts aggregate.
4. All foundations should be cast on a lean concrete layer. The lean concrete should be placed on well compacted ground.
5. Concrete should be mixed using a concrete mixer. Concrete should not be mixed by hand. When pouring concrete into the formwork, the mix should be compacted using a mechanical vibrator.
6. Aggregate used for concrete works should not be larger than 20mm.
7. Sand and aggregate used for concrete works should be clear from dust, mud and other debris.
8. All reinforcement bars used for the concrete works should be free from rust and grease that could weaken the bonding between the reinforcement bar and the concrete. Care should be taken to use continuous bars rather than short segments joined by laps.

Masonry Works

1. All masonry work should be done using Cement confirming to BS12 standards.
2. Masonry blocks should be made from imported sand or local white sand sourced from a permitted sand borrow area. The sand should be free from organic matter and other debris.
3. Masonry blocks should be made from mortar mixed at 1:5 ratio with 1 part cement to 5 part sand.
4. Average size of sand particles should not exceed 5mm.

Plastering Works

1. All plastering work should be done using Cement confirming to BS12 standards.
2. Plaster mix should be made from imported or local sand white sand sourced from a permitted borrow area. The sand should be free from organic matter and other debris.
3. Plaster mix should be made by mixing Cement and Sand at a ratio of 1:3 with 1 part Cement to 3 part Sand.
4. Average size of sand particles should not exceed 5mm.

Structural Steel work

1. All steel pipes obtained for the work should be new pipes and free from rust.
2. Thickness of pipes should not be less than 2.5mm

Electrical works

1. All materials used for electrical wiring should comply with MEA standards.

Roofing works

1. All materials used for roofing work should be newly purchased for the project.
2. All screws or bolts used for roof fixing should be G.I or Zinc finish screws.

جَنَرُو 4 : دَسَرِيَاو نَمَرِيَاو سَمَرِيَاو رِيَاو رِيَاو رِيَاو

