

*When it comes to your safety,  
leave no room for compromise.*



Presents

**APOLLO FENCING SOLUTION**

OUR NETWORK OF INNER STRENGTH

 <b>10</b> Plants	 <b>24</b> Branch Offices	 <b>800+</b> Dealers & Distributors	 In <b>2000</b> Towns & Cities
 <b>1 Lakh+</b> Retailers & Fabricators	 <b>25.5 Lakh</b> Tonnes Capacity	 <b>30+</b> Years of Experience	

Head Office

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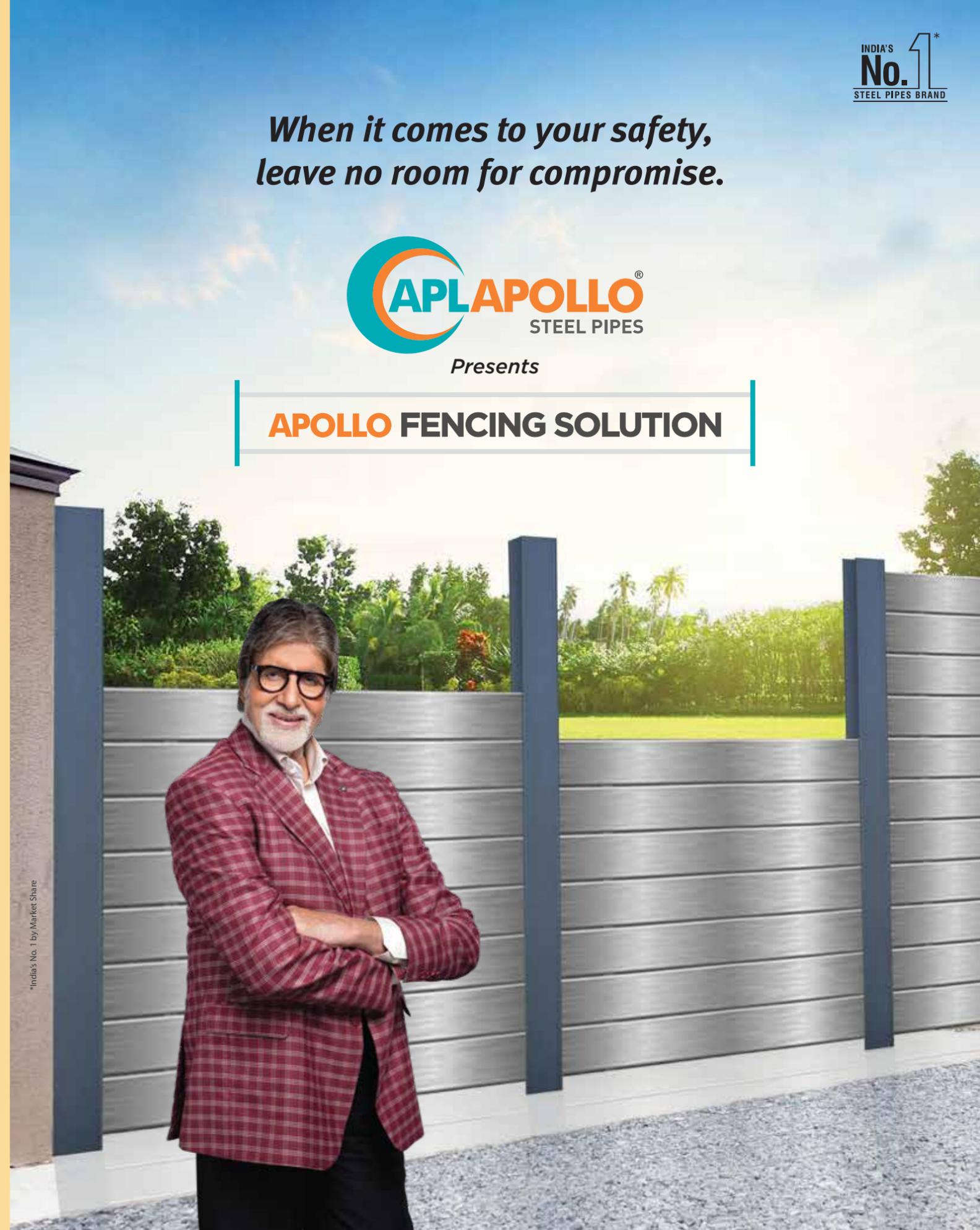
    / APL APOLLO |  / APL APOLLO OFFICIAL

[www.aplapollo.com](http://www.aplapollo.com)



Scan to know more about us

\*India's No. 1 by Market Share





## APOLLO PLANK

Our planet is our only home, our only hope. It's imperative that we protect and preserve the limited resources of our planet by taking care of its environment. One such way is to reduce deforestation, which is one of the biggest contributors to global warming.

At Apollo TriCoat, we're committed to protecting and preserving this scarce resource by offering sustainable and environment-friendly solutions. Like Apollo Plank - conceived to completely replace wood with steel across the country. Moreover, steel being a durable material is corrosion free, rust and termite-proof and fire-resistant.

## THE NEW AGE SOLUTION FOR A WIDE RANGE OF USAGE



FIRE-RESISTANT



TERMITE PROOF



DURABLE



ECO-FRIENDLY

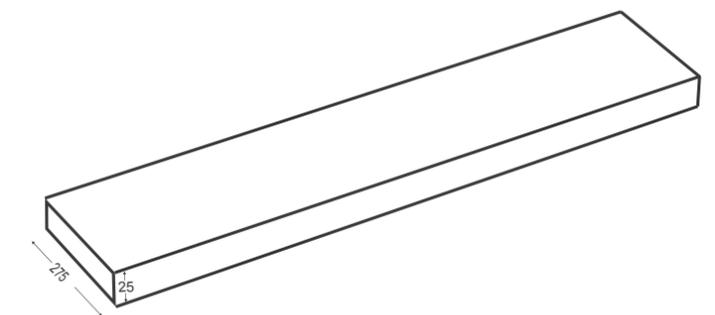


RECYCLABLE

## OUR RANGE OF STEEL PLANKS

Apollo Steel Plank comes in a wide range of choices, which are cost-effective and have multiple benefits - better aesthetics, fire-resistant, durable, easily recyclable, etc. Bring home Apollo Planks, for not just a better world, but also for a better-looking world.

Size (mm)	Thickness (mm)
125 x 25	1.6 and 2
150 x 25	1.2, 1.6 and 2
175 x 25	1.6 and 2
200 x 25	1.6 and 2
225 x 25	1.6 and 2
250 x 25	1.6 and 2
275 x 25	1.6 and 2



Note: Available in black and pre Galvanised (GP) other thickness also available on request

# APOLLO FENCE

Apollo Fence is a unique design H shaped tube which is used for fencing post. One of APL Apollo's exclusive products, it is low-cost, durable and can be used to replace concrete boundary wall. It can also be used to support various types of wire or wire mesh.

## TWO DESIGNS OF FENCE POST AVAILABLE

1

### Flat Head H section

Size: 60X80 mm and 65X43 mm  
Thickness: 1.2 mm to 2.2 mm



### Mushroom Head H Section

Size: 75X50 mm  
Thickness: 1.6 mm to 2.2 mm

2

## ABOUT APOLLO FENCING SOLUTION

You wouldn't buy a car without seat belts. And you shouldn't own a property without proper fencing. That's why, Apollo Fencing Solution gives you the most superior safety fencing and adds unmatched beauty to your property.

Apollo Fencing Solution comprises an array of uniquely designed H shaped tubes called Apollo Fence which are used for fencing post. These tubes are low-cost, durable and can be used to replace concrete boundary wall. They can also be used to support various types of wire or wire mesh.

### Apollo Plank Specification

Size: 150X25 mm  
Thickness: 1.2 mm  
Weight per plank: 98.91 kg  
Weight per running meter: 39.56 kg/m  
Steel Grade: 210  
Supply rate of steel: INR 61/kg  
No. of planks required between 2 H sections: 12

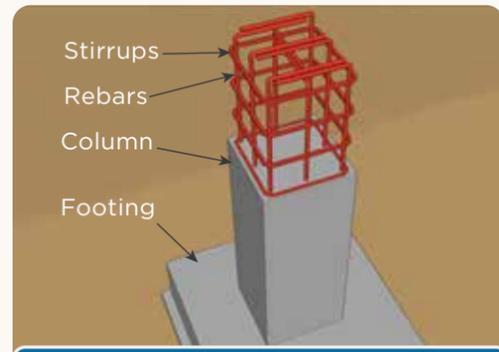
### Apollo Fence Specification

Size: 60X80 mm  
Thickness: 1.2 mm  
Weight per H Column: 6.78 kg  
Weight per running meter: 2.71 kg/m  
Steel Grade: 355  
Supply rate of steel: INR 64/kg  
No. of H Sections for 1 fence: 2

### Apollo Fencing Solution

Height of Wall: 1.8 m  
Spacing between 2 H sections: 2.5 m

**THIS DRAWING IS PROVIDED FOR PLANNING PURPOSES  
WITH REGARDS TO FIXING DETAILS**



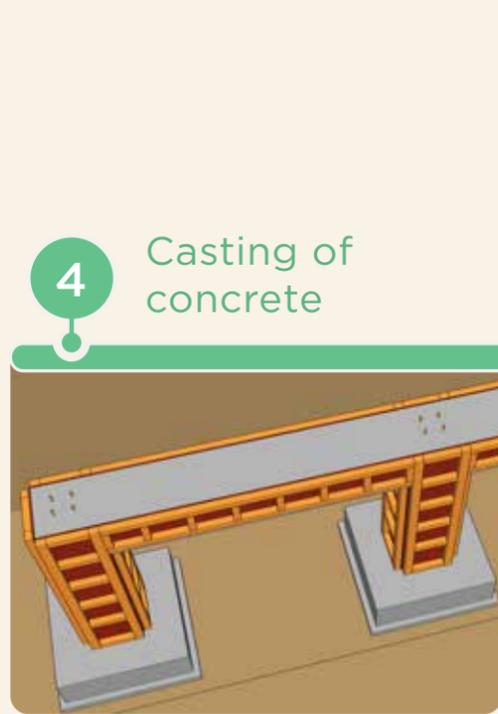
**1** Foundation works for base of boundary wall



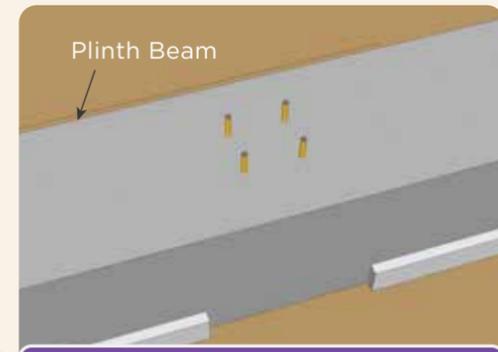
**2** Shuttering and rebar tying at plinth level



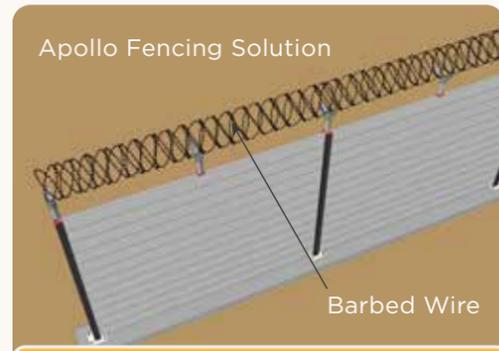
**3** Fixing of anchor bolts



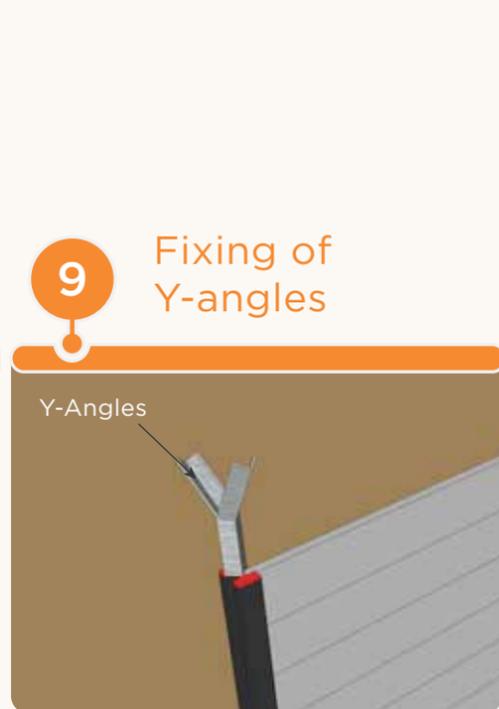
**4** Casting of concrete



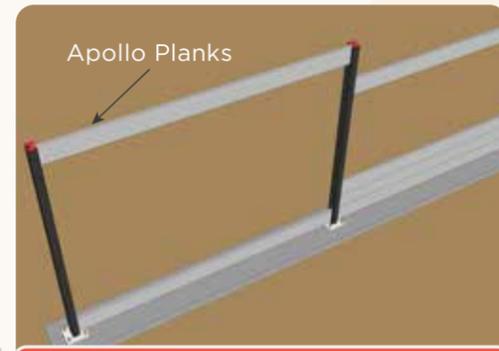
**5** Removing of shuttering & filling back of earth



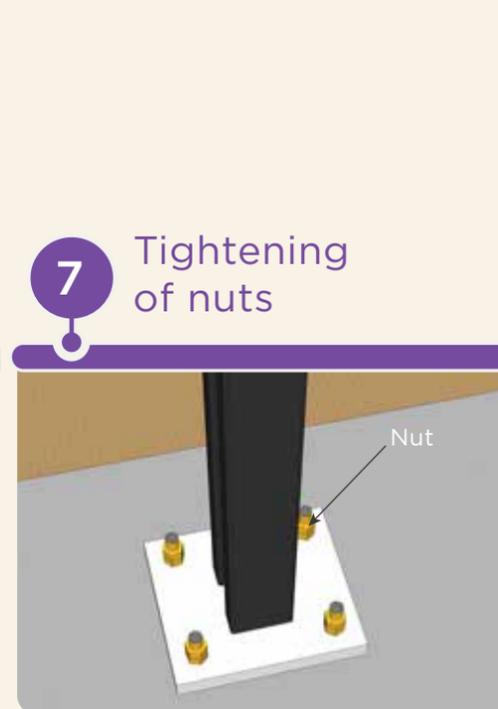
**6** Fixing of Apollo Fences



**9** Fixing of Y-angles



**8** Insertion of Apollo Planks

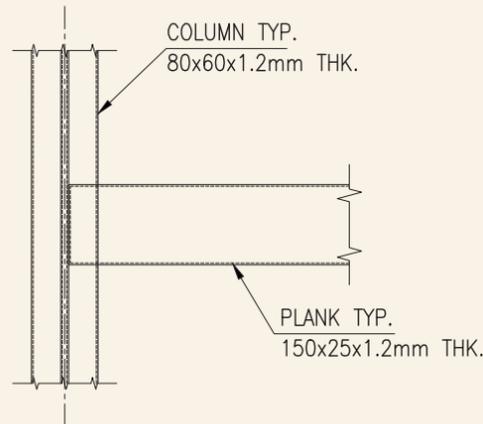
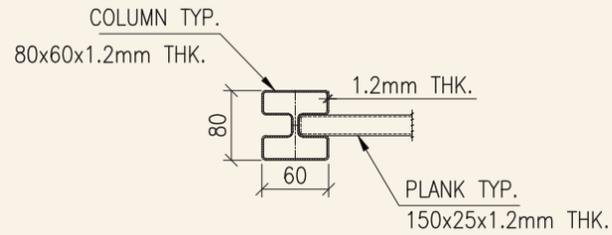


**7** Tightening of nuts

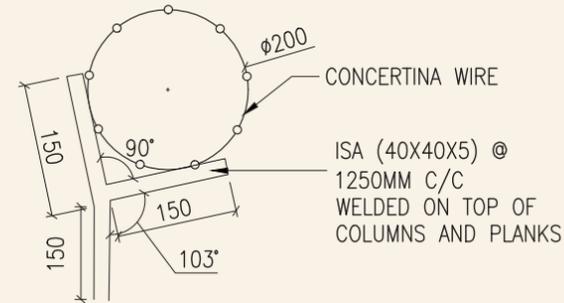


**10** Tying of barbed wire

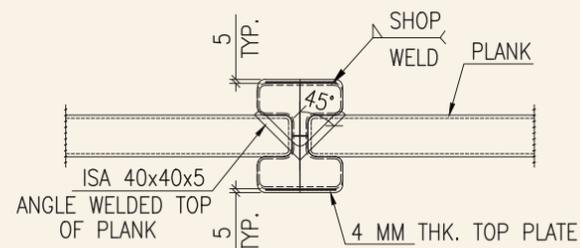
## 1. FIXING DETAILS OF APOLLO PLANK



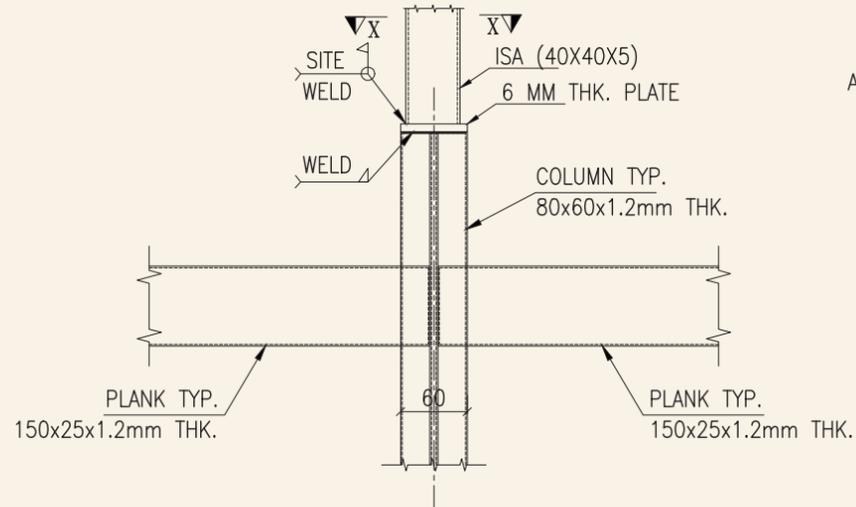
TYP. PLANK FIXING DETAIL



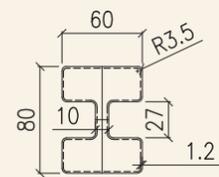
TYP. WIRE FIXING DETAIL



SECTION-X

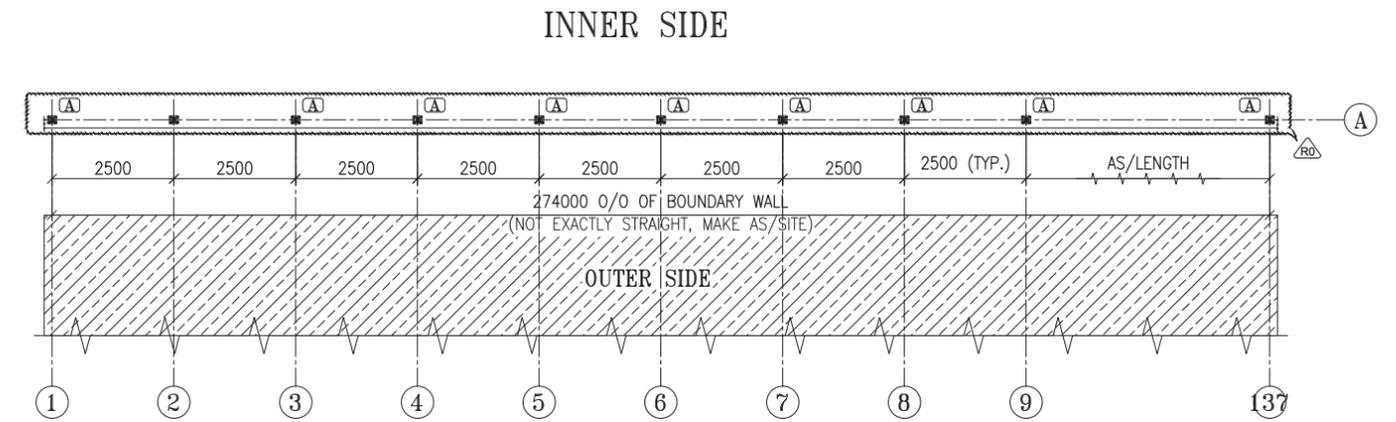


TYP. PLANK FIXING DETAIL

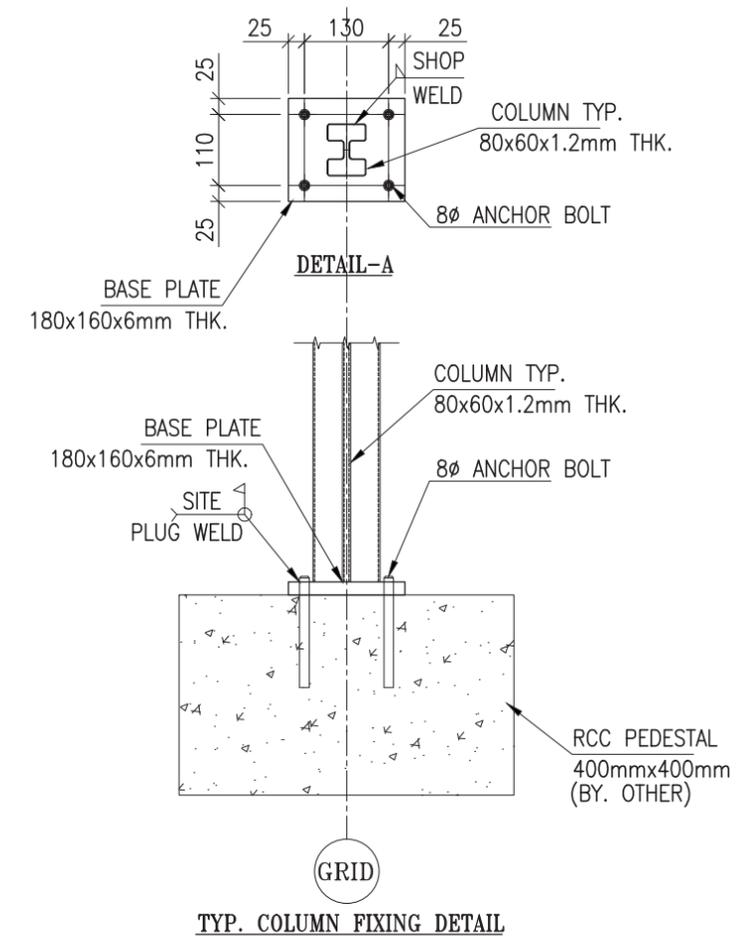


H-COLUMN DIMENSION

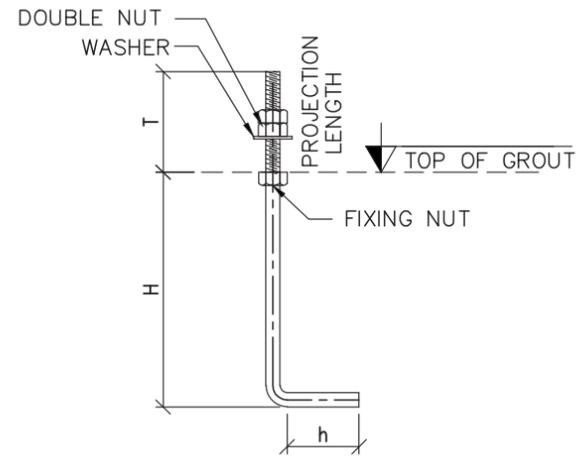
## 2. FIXING DETAILS OF APOLLO FENCE



ANCHOR BOLT PLAN



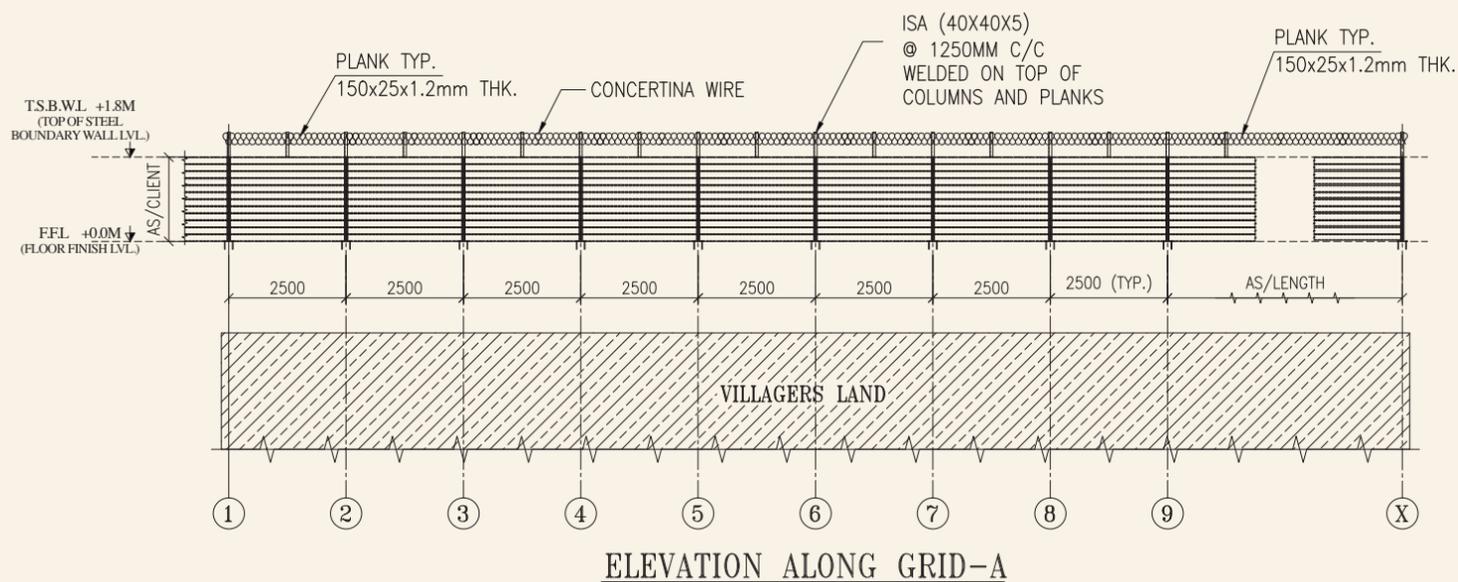
TYP. COLUMN FIXING DETAIL



ANCHOR BOLT SCHEDULE

ANCHOR BOLT SCHEDULE						
BOLT DESCRIPTION	BOLT DIA.	H	T	h	Total Length	Anchor Bolt NO. AS/DETAIL
DETAIL -A	08	150	50	100	300	04

### 3. ELEVATION OF BOUNDARY WALL



## FOR CALCULATING THE WIND LOAD ON APOLLO FENCE

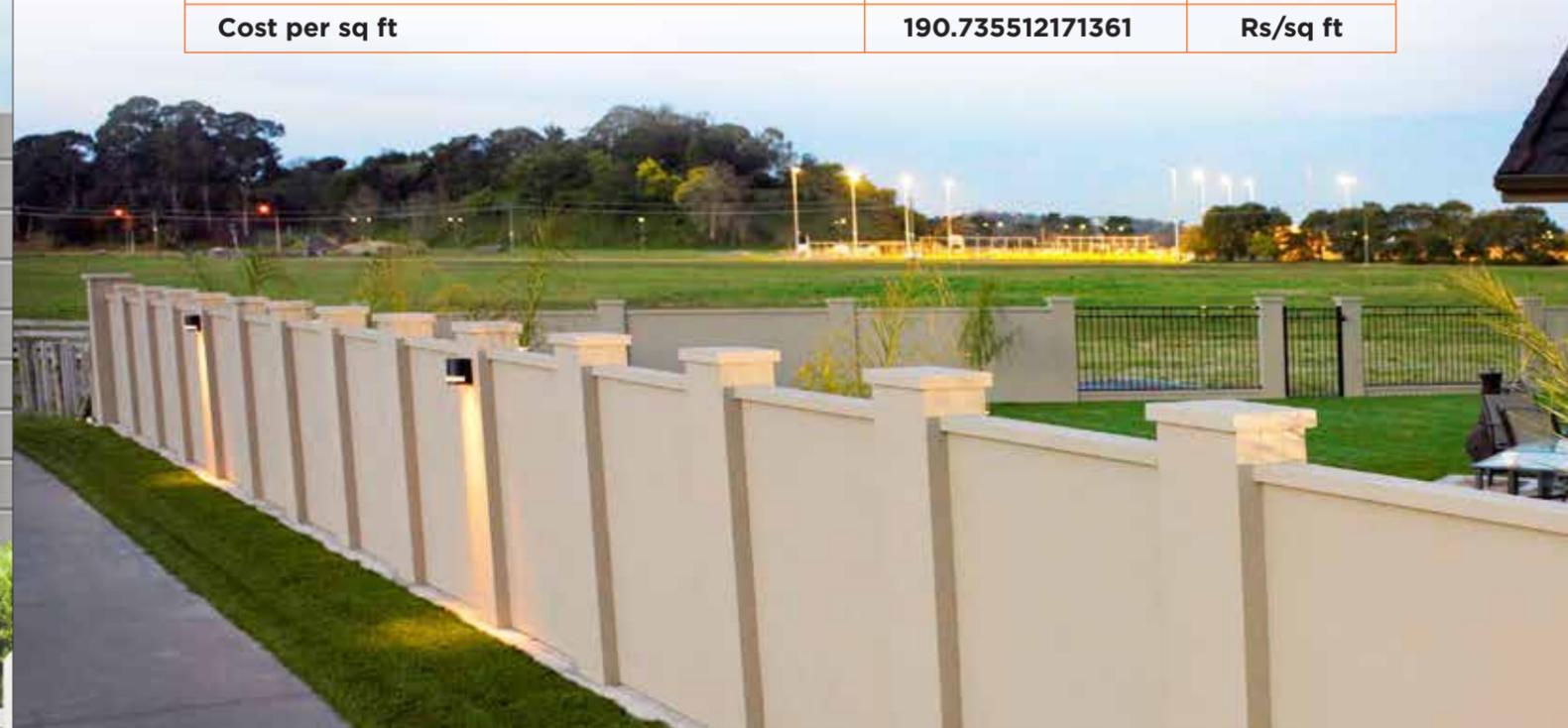
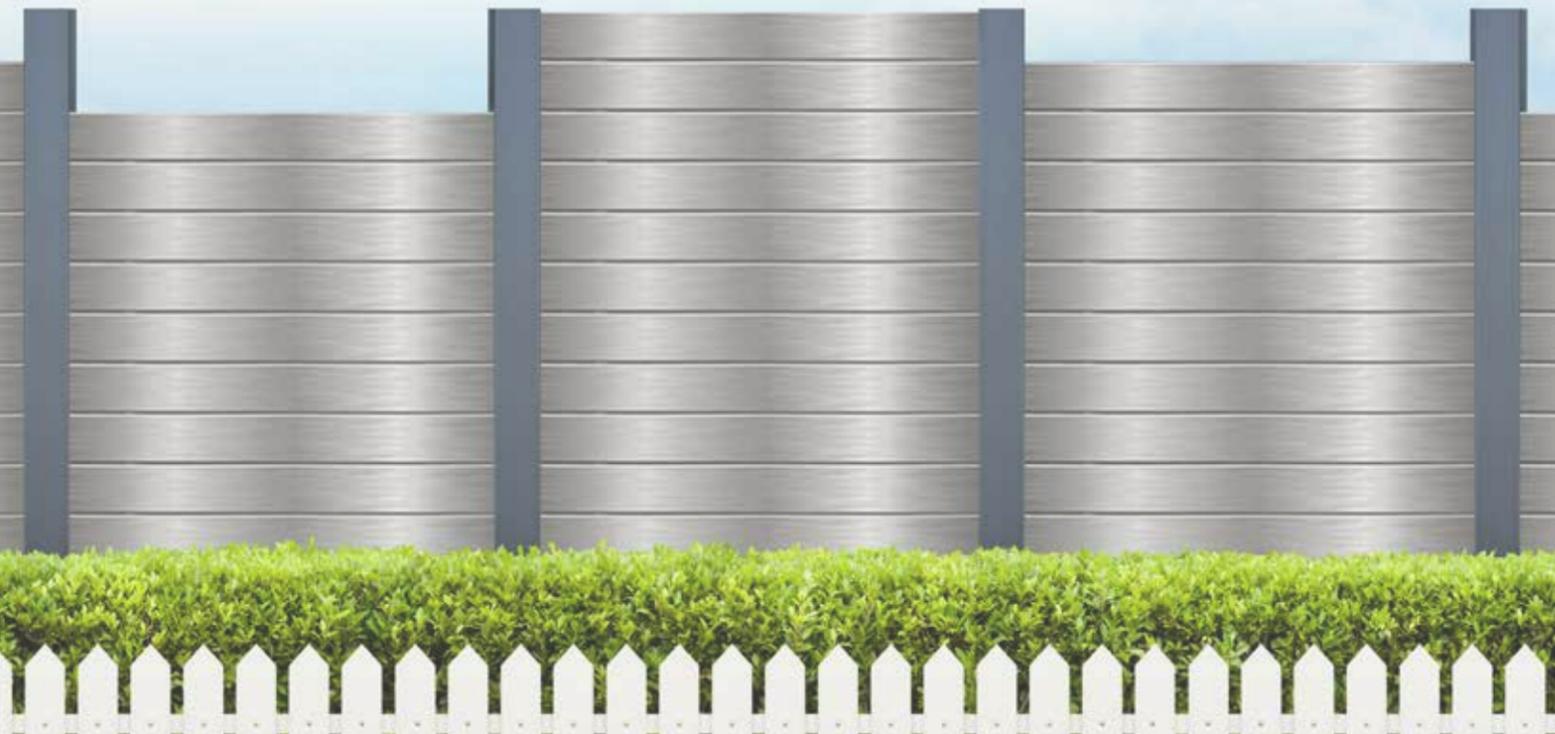
### Wind load Calculations

Input Factors	Symbols	Value	Units
<b>Geometry of boundary wall</b>			
Length	$L_o$	360.00	m
Height	$H_o$	$1.8+0.15+0.2 = 2.15$	m
Width	$B_o$	0.025	m
<b>Following are the design assumptions</b>			
Basic wind speed	$V_b$	47.00	m/s
Design life - 50 years as per IS Code			
Probability factor	$k_1$	1.00	
Assuming not much obstruction around the boundary wall			
Terrain roughness factor	$k_2$	1.00	
Assuming almost level terrain			
Topography factor	$k_3$	1.00	
Since, boundary wall is not an important structure			
Importance factor	$k_4$	1.00	
Hence,			
Design wind speed	$V_z$	47.00	m/s
Wind pressure	$P_z$	1.06	$kN/m_2$
Wind directionality factor	$K_d$	0.90	
Combination factor	$K_c$	0.90	
Drag coefficient of wind	$C_f$	2.00	
<b>Load on plank</b>			
Width of plank	$b$	0.15	m
Length of plank	$L$	2.50	m
Tributary area	$A$	0.38	$m_2$
Area averaging factor	$K_a$	1.00	
Design wind pressure	$P_d > .7 * P_z$	0.86	$kN/m_2$
Design wind load	$w$	0.26	$KN/m$
Hence, this is the value used in analysis of the structure.			

## GIFT YOUR HOME INCREDIBLE BEAUTY AND UNMATCHED SAFETY AT A REALLY LOW COST

Apollo Fencing	Amount	Unit
Height of wall	1.8	m
Spacing between H columns	2.5	m
Plank cost	61	Rs/kg
H Section Cost	64	Rs/kg
Plate Cost	52	Rs/kg
Total weight per sq ft	2.21	kg/sq ft
Supply cost per sq ft	134.98	Rs/sq ft
Fabrication cost per sq ft	33.15	Rs/sq ft
Cost of Anchor Bolt per sq ft	0.97	Rs/sq ft
<b>Total cost per sqft</b>	<b>169.1</b>	<b>Rs/sq ft</b>

Brick wall	Amount	Unit
Height of wall	1.8	m
Thickness of wall	0.115	m
Spacing between RCC columns	4	m
Cost of cement per bag	270	Rs/bag
Cost of concreting works	4375	Rs/m <sup>3</sup>
Cost of Shuttering works	425	Rs/sq m
Cost of Column reinforcement supply and tying	55	Rs/kg
Cost of beam reinforcement supply and tying	55	Rs/kg
Cost of brickwork	5775	Rs/m <sup>3</sup>
Cost of plastering	240	Rs/sq m
Cost of painting	180	Rs/sq m
Cost of cement per sq ft	7.374308864256	Rs/sq ft
Concreting work cost per sq ft	18.19544748	Rs/sq ft
Shuttering work cost per sq ft	19.21544544	Rs/sq ft
Cost of column reinforcement work per sq ft	9.27010529124188	Rs/sq ft
Cost of beam reinforcement work per sq ft	6.60863298146321	Rs/sq ft
Brickwork cost per sq ft	52.0330185144	Rs/sq ft
Plastering cost per sq ft	44.5934592	Rs/sq ft
Painting cost per sq ft	33.4450944	Rs/sq ft
<b>Cost per sq ft</b>	<b>190.735512171361</b>	<b>Rs/sq ft</b>



RCC precast wall	Amount	Unit
Height of wall	1.8	m
Thickness of wall	0.075	m
Spacing between RCC columns	3	m
Cost of cement per bag	270	Rs/bag
Cost of concreting works	4375	Rs/m <sup>3</sup>
Cost of Shuttering works	425	Rs/sq m
Cost of Column reinforcement supply and tying	55	Rs/kg
Cost of precast RCC works	18000	Rs/m <sup>3</sup>
Cost of plastering on column	240	Rs/sq m
Cost of painting on column	180	Rs/sq m
Cost of white washing on wall	42	Rs/sq m
Cost of cement per sq ft	5.822122033152	Rs/sq ft
Concreting cost per sq ft	13.87352064	Rs/sq ft
Shuttering cost per sq ft	16.84641792	Rs/sq ft
Cost of column reinforcement work per sq ft	12.3601403883225	Rs/sq ft
RCC Cost per sq ft	112.04106624	Rs/sq ft
Plastering cost per sq ft	4.756635648	Rs/sq ft
Painting cost per sq ft	3.567476736	Rs/sq ft
White washing cost per sq ft	7.80385536	Rs/sq ft
<b>Cost per sq ft</b>	<b>177.071234965475</b>	<b>Rs/sq ft</b>

