

# ALU DECK GRATING



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# ALUMINIUM DECK GRATING



## ALUDECK-TYPE GRATING :

Aluminium Deck (ALUGRATE) made by WEST-COAST ENGINEERING WORKS (P) LIMITED are extruded with I-bar/box sections on bottom and a solid top that acts as a top flange of the Bar/Box section. After extrusion it is punched to create a grating like pattern.

Aluminium Deck is a solid type Grating with bottom box section developed and innovated by west coast for special applications mentioned below. These Gratings are available in 4 to 5 meters length(max) and 200-250 mm in width with a choice of 30/50mm thickness.

### APPLICATION:

Plank type Aluminium grate flooring is used for industrial grating flooring especially for:

- 1.Sewage treatment plant(STP) platform to reduce visibility at bottom.
- 2.Off shore marine platforms in mid sea to reduce vertigo effect of sea waves.
- 3.Ship decking (solid gratings)
- 4.Walkways and bridges for metro railway station.
- 5.Mezzanine floors for storing.
- 6.Paper Pulp,
- 7.Waste water treatment plant.

Aluminium Deck are made wider by inserting into each other for achieving the desired width. Aluminium Deck can be made to size lengthwise as per required and you can achieve any required layout for constructing platform.(Refer sketch attached). Interconnected deck panels offers flush top walking surface for maximum foot grip for an excellent antiskid walking surface.

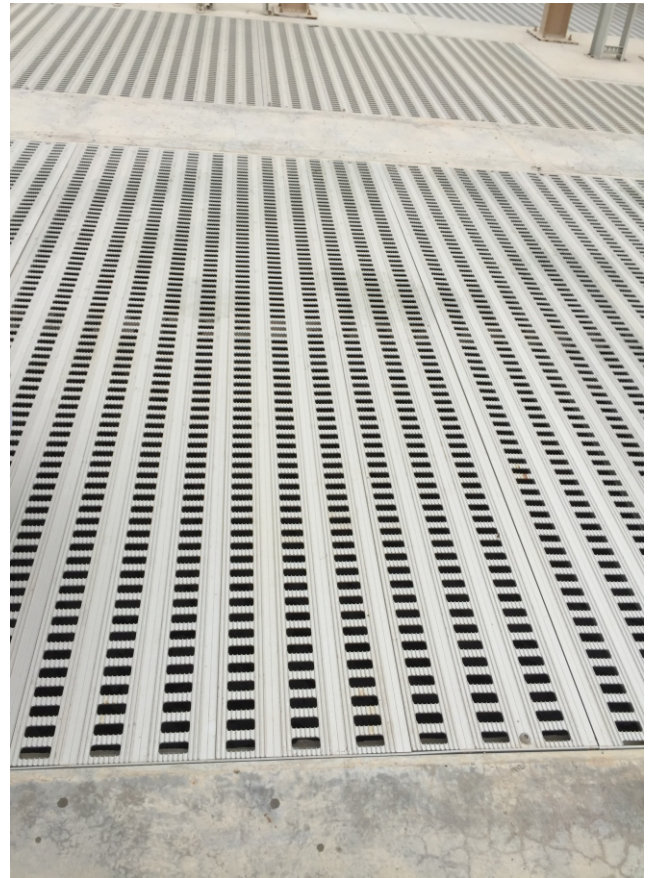
Aluminium Deck can be made with/without punches with required opening for easy airflow for dissipation of heat to avoid odour from sewage plant.

# ALUMINIUM DECK GRATING

Aluminium deck type floor gratings are monolithic floor with checker type plate on top and homogenously supported on box type or flat bar at 50-60 mm distance. This monolithic structure enhances and improves moment of inertia with which its load carrying capacity is increased substantially and provides maximum foot contact with excellent strength to weight ratio.

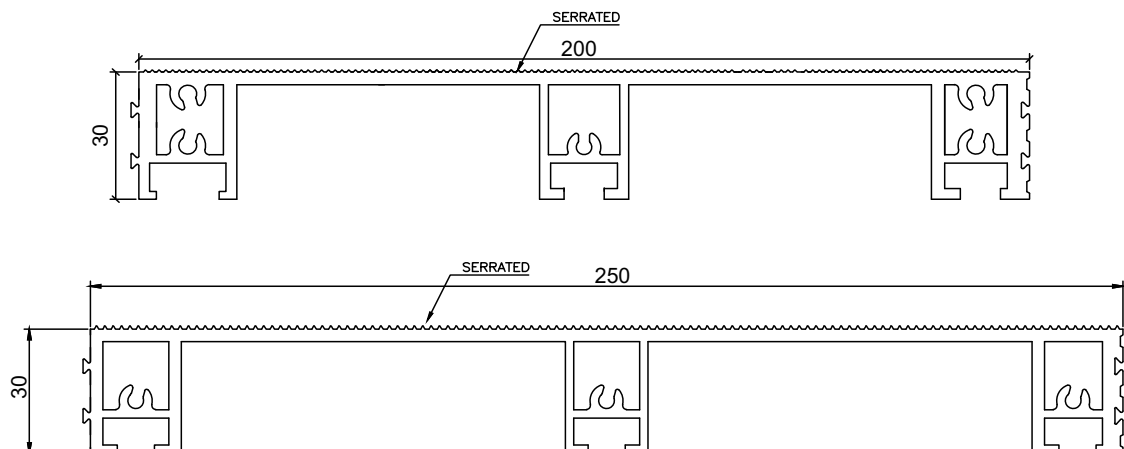
## PRODUCT INFORMATION:

1. Material of Construction: Aluminium Alloy Aa6063 T6.
2. Process: By Aluminium extrusion process.
3. Thickness: Thickness of top plate 3/3.5mm, bottom support either of "I-bar" or box section at 50-60 c/c, length upto 5 mtr.
4. Standard width: 200/250mm. It can be joint together to make larger width by inserting to each other to make them wide floors.
5. Decks are hooked together to increase variable widths. The profiles are hooked together and locked during installation.
6. Standard length : 4000mm to 5000mm.
7. Deck style : Solid type & Open type (Punch Type).
8. Open area: Opening in floor varies between 8-23% depending upon application.
9. Finish: Available in Mill finish or anodize as required.
10. Bolted to frames.
11. Properties: It is a perfect anti-skid surface with more foot contact area. So that one can walk very safely even during rain or slippery surface.



## ADVANTAGES OF DECK TYPE GRATING:

1. Easy to install with least consumption of time.
2. Easy to adjust adapt all site condition.
3. Excellent economic efficient due to low weight with longer span compared to weight ratio.
4. Flexible handling due to light weight easy to insert with each other to make width required.
5. Excellent for span up to 50mm when coupled together.
6. Custom made as per site requirement.
7. Cut-Outs: Desired Cutout for opening can be made during shop fabrication as per site requirements.



## DECK SECTION AVAILABILITY:



# ALUMINIUM DECK GRATING



### Installed Deck type Grating with cut out opening

% Open Area*	
Oblong.	37%
Square	23%

## “ALUDECK” INTERLOCK GRATINGS LOAD TABLE

<b>Size</b> (In mm)  Width x Depth	<b>Per one meter Moment of inertia</b>	<b>Section weight</b> (in kg/m <sup>^2</sup> )	<b>Clear Span (in mm)</b>			
			<b>S P A N</b>	<b>1000</b>	<b>1600</b>	<b>2000</b>
200x30 mm	61.4	18.96	<b>U</b>	<b>500</b>	<b>500</b>	<b>500</b>
			<b>D</b>	<b>0.9</b>	<b>1.24</b>	<b>2.42</b>
			<b>PD</b>	<b>5.00</b>	<b>8</b>	<b>10</b>
250x30 mm	58.68	17.62	<b>U</b>	<b>1000</b>	<b>1000</b>	<b>750</b>
			<b>D</b>	<b>1.1</b>	<b>3.39</b>	<b>4.75</b>
			<b>PD</b>	<b>5.00</b>	<b>8</b>	<b>10</b>
<b>NOTE: U=UDL in kg/m<sup>^2</sup>                      D=Deflection in mm</b>						
<b>PD= Permissible Deflection L/200 as per BS4592</b>						
<b>Above data is based on Top Solid &amp; No Punching</b>						
<b>NOTE: FOR 30 Deep Grating max Span = 1500/1600</b>						