COMPOSITE FLOOR DECKING
FOR FASTER CONSTRUCTION

DECKING
PROFILES

PENNAR INDUSTRIES LIMITED
(An ISO 9001:2000 Certified Company)
INTRODUCTION
PENNAR INDUSTRIES LIMITED, an ISO 9001:2000 accredited company having four manufacturing plants located at Patancheru, Isnapur (both near Hyderabad), Chennai and Tarapur. PENNAR manufactures different steel products like Cold Rolled Steel Strips, Cold Roll Formed Steel Sections, Engineering components, Metal Crash barriers for Road safety and ERW Tubes.

Cold Roll Formed Sections (CRFS) Division manufactures Products for Construction / Steel buildings / EPC industry (Metal decking, Purlins & Runners, Roofing sheets, etc), Special sections & Panels for Automobile & Engineering industries, Long profiled steel sheets such as Collecting and Discharge Electrodes for ESP, Stringer channels for Material Handling industry, Trough floor & other sections for Railway wagons and coaches.

METAL DECKING
Composite Floor Deck is a steel deck with a ribbed profile, which binds with concrete slab and together forms a part of the floor structure. This interlocking between the concrete and the floor deck is brought about through a system of embossment and ribs which are built into the deck, creating a reinforced concrete slab that serves the dual purpose of permanent form and positive reinforcement. Composite decking is one of the most effective method of constructing floors in steel building and very useful in high rise RCC / Steel Buildings.

Started in 1988, PENNAR specializes in metal decking and has supplied to many industries like construction, cement, metals & mining, automobile, power, etc. and has more than 1000 successful implementations all over India. PENNAR has standard profiles which can be supplied within a short time and also develop customized decks suitable for specific requirements.

Metal decking can be effectively used in Multi-storey buildings (Industrial / Residential), Shopping malls, Super markets, SEZs, Silos, Storage facilities, mezzanines, bridges, walkways, platforms, etc.

TECHNICAL SPECIFICATIONS
PENNAR METAL DECKING is available in 44mm, 52mm and 75mm depth profiles with thickness range of 0.80mm to 2mm.

Profiles : 44/130 (44mm depth x 956mm width)  
75/230 (75mm depth x 718mm width)  
52/271 (52mm depth x 845mm width)

Thickness : 0.80 to 2mm
Length : upto 12000mm
Material : CR Steel as per IS:513 D-Quality / HR Steel as per IS:1079 / Galvanized Steel (as per IS:277)
Type : Bare, Primer coated, Galvanized, Pre-Painted

We supply suitable size of decking with optional feature of dimpling, shear connectors and ribs, as per customer’s specifications / drawings, for easy erection and also to avoid any wastage / rework at site.

BENEFITS OF PENNAR METAL DECKING
• Light weight and doesn’t require any support, which considerably reduces the use of concrete & slab thickness.
• Acts as composite member and as permanent shuttering.
• No major reinforcement required.
• Deck can be used as working platform during construction.
• Speedy construction enables faster completion of a project.
• Metal deck can also be used as roofing and cladding sheet in cement, power plants and bulk material handling plants.
• Decking reduces the construction time, hence the total cost.

SOME OF OUR INSTALLATIONS

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<td>Ford India Ltd</td>
<td>Chennai Plant</td>
<td>Plant Buildings</td>
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Notes (Common to all Deck Profiles)

1. The properties given are for one meter width of the Profile.
2. Limiting deflection is taken as span / 150.
3. Allowable loads are applicable for sheets spanning over a minimum of four supports and for permanent shuttering only.
4. Allowable loads may be multiplied by a factor of 0.80 for sheets spanning over 2 or 3 supports.
5. Shear Connectors / Ribs are optional.
TYPICAL FIXING ARRANGEMENT DETAILS

SECTION S1-S1

TYPICAL SHEET FIXING DETAIL

PENNAR INDUSTRIES LIMITED
(An ISO 9001:2000 Certified Company)
A leading manufacturer & supplier of
‘Cold Roll Formed Sections, Pressed Components,
ERW Precision Tubes & Cold Rolled Steel Strips’

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