



ArcelorMittal

steel design

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PROJECT SUBMISSIONS

Do you have a project using sheet steel that you would like to see in *Steel Design*? The editor welcomes submissions of completed buildings—commercial, institutional, industrial, recreational and residential—using components made from steel, including cladding, steel decking, light steel framing, steel roofing, steel doors, steel ceiling systems and steel building systems.

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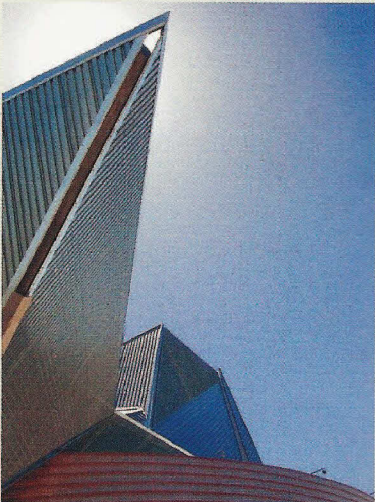
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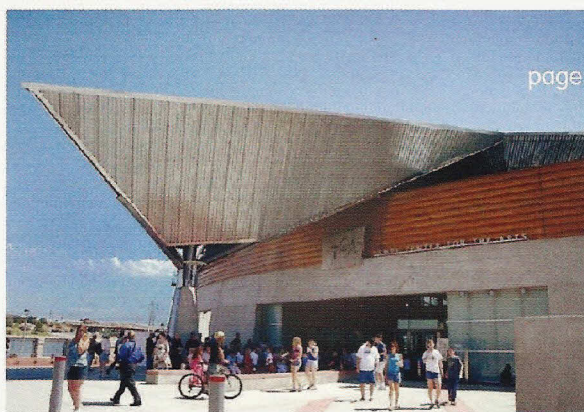
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COVER PHOTO: TEMPE CENTER FOR THE ARTS
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ArcelorMittal

transforming
tomorrow

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3 Tempe Center for the Arts, Tempe, Arizona

The Tempe Center for the Arts (TCA) has been described as "strikingly magnificent" and the roof as its "signature element." According to Tempe Architects, Architekton, who designed the structure in conjunction with Barton Myers & Associates of Los Angeles, a steel roof "offered the best combination of durability and aesthetics."



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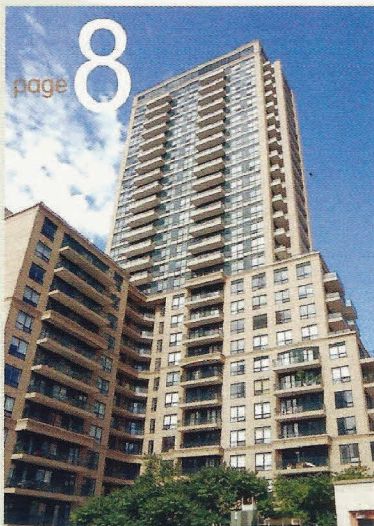
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6 The ArcelorMittal warehouse, Port of Auliés, Spain

The ArcelorMittal warehouse, a bolted steel structure, is one hundred percent disassemblable and recyclable. The architect drew inspiration for its design from the recyclability of the materials in order to create a work that is both ephemeral and dynamic in its shape, in its location and in its use.

8 Bloor Street Neighbourhood, Toronto, Ontario

For Toronto's 32-storey, 349-unit Bloor Street Neighbourhood, the exterior envelope consists of pre-assembled light steel framed panel assemblies to which the attractive Dryvit exterior is mechanically fastened. The structural stud within the panels also forms the cavity for the interior insulation, the wiring, and the services, and carries the inside finishes.

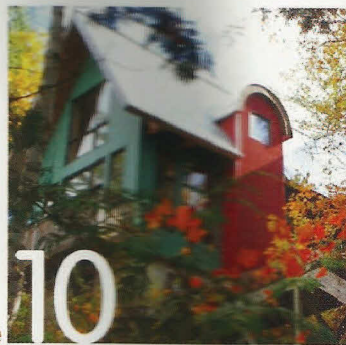


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10 Colourful pre-painted steel adds charm to Quebec cottage

The use of colourful steel for the roof and exterior wall cladding sets this unique cottage apart from others in the area. The cottage was constructed with a post and beam skeleton, then completed with structural insulated panels (SIPs), forming walls, floors and roof, with pre-painted galvanized cladding on the walls and roof.



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12 University of Waterloo Health Sciences Campus, Kitchener, Ontario

The buildings, designed by Robbie Young + Wright/IBI Group Architects in joint venture with Hariri Pontarini Architects, are located at King and Victoria Streets. They house the Waterloo's School of Pharmacy, McMaster's Michael G. DeGroote School of Medicine and UW's Integrated Primary Health Care Teaching Clinic.

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Carbon Neutral Steel Building System (CN-SBS) Project Update • Kill' Bill – What's in a word? • Light Steel Framing – and the Environment • Galvalume™ – the Steel Product of Choice for Superior Corrosion Resistance • EcoLogo: Setting the Environmental Standard for Recycled Steel.

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The ArcelorMittal warehouse in the Port of Avilés, Spain, a bolted steel structure, is one hundred percent disassemblable and recyclable. The architect drew inspiration for its design from the recyclability of the materials in order to create a work that is both ephemeral and dynamic in its shape, location and use. The ArcelorMittal industrial sheds are situated in an exceptional location – on the Ria of Avilés, at the San Agustín dock, facing the city.

Cold formed steel offers many benefits and savings



The ArcelorMittal warehouse in the Port of Avilés, Spain, is one hundred percent disassemblable and recyclable. It was established as a transitory work that can be disassembled and moved to another location or even its purpose changed, over time, to venues such as concerts, exhibitions, cultural activities, recreation, etc.

It is an industrial landscape, among cranes and one of ArcelorMittal factories as a backdrop. With the rapid development this Asturian city is undergoing, the new plan for the Ria Isla de la Innovación – Island of Innovation – and the presence of a building by Pritzker prize winner Oscar Niemeyer, enticed us to put forward an alternative for an existing project, a conventional industrial building with a gabled roof and a 120m (393.7') facade facing the city.

We immediately brought up the concept of Industrial Sheds, those simple, old port buildings used for the warehousing of materials. Thus, the idea of containers arose, an image of portside life engraved on the retinas of the people. The facades and roof are made up to appear as containers, dividing up the large buildings into colour pixels intended to blend the large-scale work into its surrounding, providing the area with movement, colour and cleverly used nighttime illumination.

The selection of the range of colours did not only stem from the immediate association with the corporate image of both companies, but was also intended to relate to the industrial areas. And there was a deliberate attempt to

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choose colours which, historically, have been used in the construction of industrial buildings, just employing and combining them in a different way.

On a dark metal base, built to resemble the hull of a ship, rises the tower. A subtle beacon emerging from the landscape, addressing the cranes and stacks and serving to break up, once again, the continuity of the facade. This element will house the company logos that the building will bear while also

serving as a boundary for the roof, which becomes the building's fifth facade and serves as an aerial reference point for planes landing or taking off from the nearby Asturias airport.

The sheds are built entirely of steel, including the frame, the exterior building skins, facades and roof. Thus, it meets the requirements of the plan, the history of the place itself as well as the users of the building, ArcelorMittal, the world's leading producer of steel and AGP (Actividades Generales Portuarias) a company dedicated to transport management in the Port of Avilés.

Logical and rational use of materials and manner of construction were addressed in the construction of the industrial warehouses. All of its components are produced at the nearby ArcelorMittal factories and, because it is a bolted-steel structure, they are one hundred percent disassemblable and recyclable. It is also composed of more than seventy percent of recycled material, produced using an electric furnace system.

200 tonnes of structural beams:

Main structure: 50 ton HEA 240, HEA 280, IPE 200 and IPE 240 on S275 JR,

Substructure: 150 ton cold-formed profiles;

- 8000m² (86,111 sq. ft.) sheet PL 40/250 and 0.80mm (.032") thick galvanized steel and polyurethane polyamide Granite® coating;
- 650m² (7,000 sq. ft.) of 1150mm (45.3") panel, 35mm (.013") thick.

It is established as a transitory work that, according to the development of the city, can be disassembled and moved to another location or even its purpose can be changed over time – from warehousing to venues such as concerts, cultural activities, exhibitions, recreation, etc.

An evolutionary building, adapting itself to the needs of the area and the city. A dynamic building that speaks to its surroundings, to the ships, to the sea.



The facades and roof are made up to appear as containers, dividing up the large building into colour pixels intended to blend the large-scale work into its surroundings.

Logical and rational use of materials and manner of construction were addressed in the construction of the Industrial Sheds. The warehouses are built entirely of steel, including the frame, the exterior building skins, facades and roof.

