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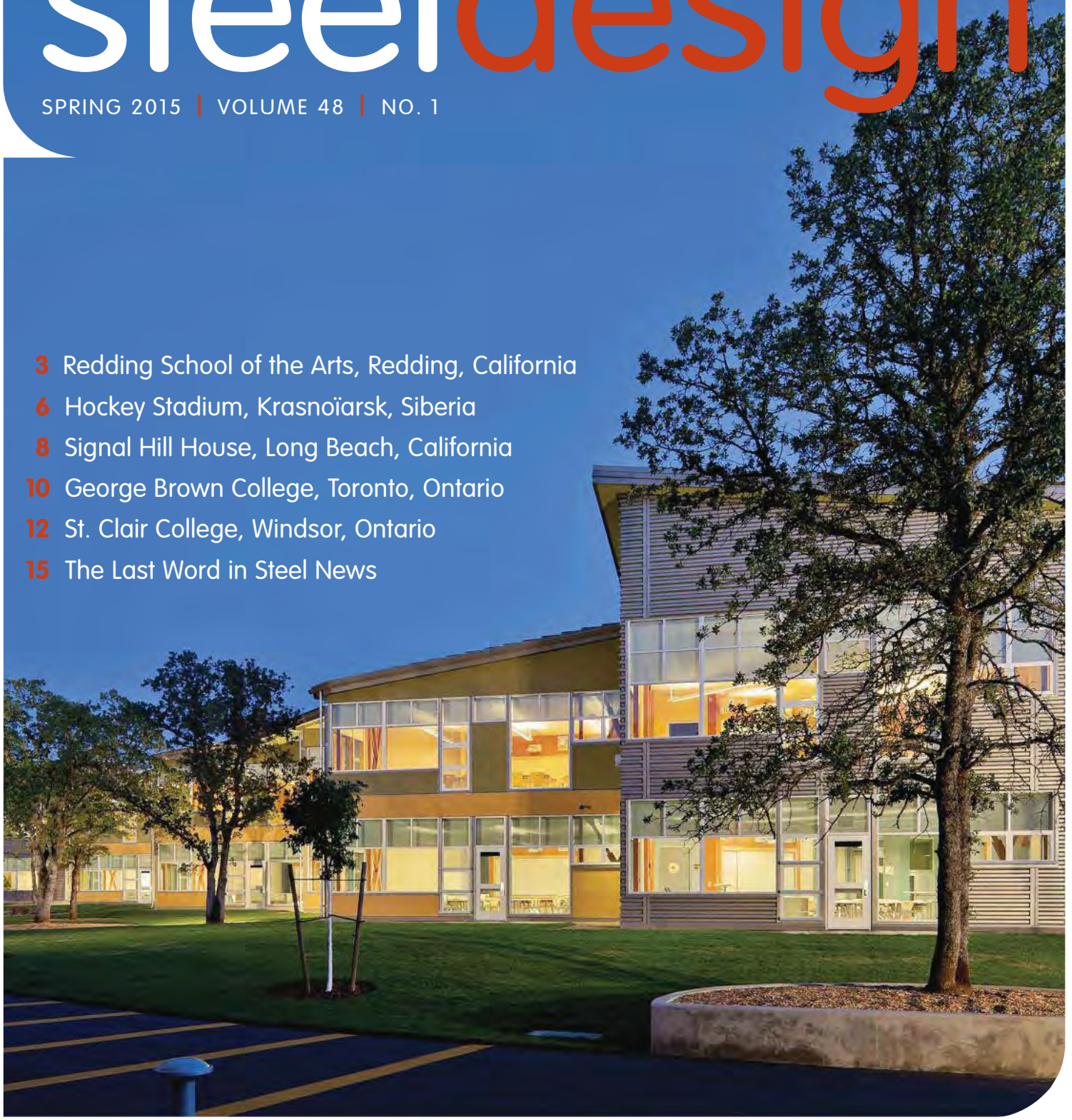

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PROJECT SUBMISSIONS

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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COVER PHOTO: Redding School of the Arts, Redding, California
PHOTOGRAPHER: Steve Whittaker

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transforming tomorrow

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Opened in Fall, 2011, this 7,153m² (77,000 sq. ft.), K – 8 school has been incorporated into the teaching curriculum as "a tool for teaching green", for its children, parents and teachers, as well as the local community and beyond. To date, the school has received numerous national awards, including the 2011 Beyond Green™ High Performance Building Award. With the 2012 Design Excellence Award from the American Institute of Architects, jurors remarked, "this project may best capture the spirit of innovation in design."

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"Steel fit well within that context. It has an industrial tone to it. The angles of the house had to look precise," Nader Ghassemlou says. "I chose steel for its mobility, aesthetics, and durability. Durability was very important to me. On Long Beach, things rot and rust quickly because they are so close to the ocean".

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12 St. Clair College, Windsor, Ontario

The Fall of 2014 saw the official opening of the 7,896.5m² (85,000 sq. ft.) 'SportsPlex' at St. Clair College, Windsor campus. It includes a triple gymnasium, 929m² (10,000 sq. ft.) fitness centre, elevated walking track, workout studios, 12 team rooms, classrooms and more. Steel plays an integral role in both the functionality and appearance of the complex.

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COLD-FORMED STEEL ENGINEERS INSTITUTE CANADA

Redding School of the Arts, a distinguished California charter school, has developed a clear vision around teaching and the performing arts. Opened in Fall 2011, it was the first new school campus in the world to be awarded LEED for Schools 2009 Platinum certification. The School has been designed with a balance between traditional design elements and innovative technology concepts. LEED's highest certification, however, is only the starting point.

Redding School of the Arts – a tool for teaching GREEN

Decisions have consistently been made to explore as many examples of environmentally friendly ideas as possible for student learning opportunities, even when those decisions haven't necessarily contributed to the LEED score card.

This 7,153m² (77,000 sq. ft.), K – 8 public charter school has been incorporated into the teaching curriculum as "a tool for teaching green", for its children, parents and teachers, as well as for the local community and beyond. To date, the school has received numerous national awards, including

The Redding School of the Arts' energy-efficient program was designed to meet the requirements for LEED Platinum certification. Trilogy received the National Institute of Building Sciences Sustainable Buildings Industry Council (SBIC) 2011 Beyond Green™ High Performance Building Award, for the school. In addition Triology received the 2012 Design Excellence Award from the AIA.

Redding School of the Arts has been designed with a balance between traditional design elements and innovative technology concepts.

the 2011 Beyond Green High – Performance Building Honor Award. With the 2012 Design Excellence Award from the American Institute of Architects, jurors remarked, "this project may best capture the spirit of innovation in design."

The goal of the design team was that when completed the school would serve as both an environmental model for other schools and an inspiring learning environment for its own students. Looking to break away from traditional design patterns, the design team conceived of a school where more than half of the learning space would actually be located outdoors. This was achieved both aesthetically and structurally.

With a very tight schedule, the design team had quite a challenge in developing the structure itself, all the while allowing the other design disciplines maximum flexibility in their design.

Cross-braced hollow structural section (HSS) frames using conventional wide-flange horizontal beams with HSS columns proved to be the most economical structural system and also provided an additional advantage when it came to connections. By using cross-braced HSS frames, the effective lengths of the bracing members were reduced, which allowed the connections in the special concentric braced frames to be designed for 36% less load than if standard braces had been chosen. Also, the member sizes, welds and foundations were significantly less than if a moment frame system had been chosen. The building uses 664 tons of structural steel in all.

The braced frames for the school were constructed with 127mm x 127mm x 7.9mm (5" x 5" x 5/16"), W406.5 x 660.5 (W16 x 26) floor and roof beamsand HSS 101.6mm x 101.6mm x 6.35mm (4' x 4' x 1/4") braces. The braces were designed as X-bracing to reduce the buckling length so that the brace size could be minimized. This significantly reduced the requirements for the brace connections, as their design was based on the tensile strength of the bracing.

ROOF CLADDING:
.91mm (.036") Magna Loc Pencil Rib Standing Seam PVDF (Kynar 500®)
Acrylic Coated Galvalume® colour is Champagne Metallic®

WALL CLADDING:
.61mm (.0239") IC72 Panel PVDF (Kynar 500®)
Acrylic Coated Galvalume® colour is Champagne Metallic®

COLOURS:
All colours used on the school are ENERGY STAR® rated

The standing seam roof and wall cladding is ENERGY STAR® rated. The colour on the panels assists in optimizing energy-efficiency by reflecting a significant amount of solar energy thus reducing the amount of energy needed for cooling.

Trilogy Architecture, headed by James Theimer, AIA, received the Design Excellence Award for this project. This award is designed to "identify, honour and disseminate the projects and ideas that exhibit innovation and excellence".

DESIGN AND CONSTRUCTION TEAM

ARCHITECT:
Trilogy Architecture Urban Design + Research
Redding, California 530 243-3000

CONTRACTOR: Gifford Construction 530-226-6000

STRUCTURAL ENGINEER:
Kibler & Kibler Architecture and Engineering 530-226-0566

STEEL ROOF AND WALL PANELS:
Metal Sales Manufacturing Corporation 800-406-7387

CLADDING INSTALLER:
Kodiak Roofing & Waterproofing Company 866-530- 2327

PHOTOGRAPHER: Steve Whittaker 503-482-5808

The school has been designed as three structurally distinct wings, each seismically separated from the others. The result, a total of 40 different roof planes and more than 140 structural corners, and required 102 braced frames (83 different geometries).

Krasnoïarsk is the third largest city in Siberia. It is east of Kazakhstan and north of Mongolia, in the south-central area of the region nestled on the banks of the Yenisei River that flows northward to the Arctic Ocean. Like many Russian cities its inhabitants love the "beautiful game" of soccer. And, like all soccer fans, they want their team to be the best. And that takes practice. Lots of it. Big problem: from November to March there was no facility for training on a full-size field.

Housing the beautiful game in Krasnoyarsk, Siberia

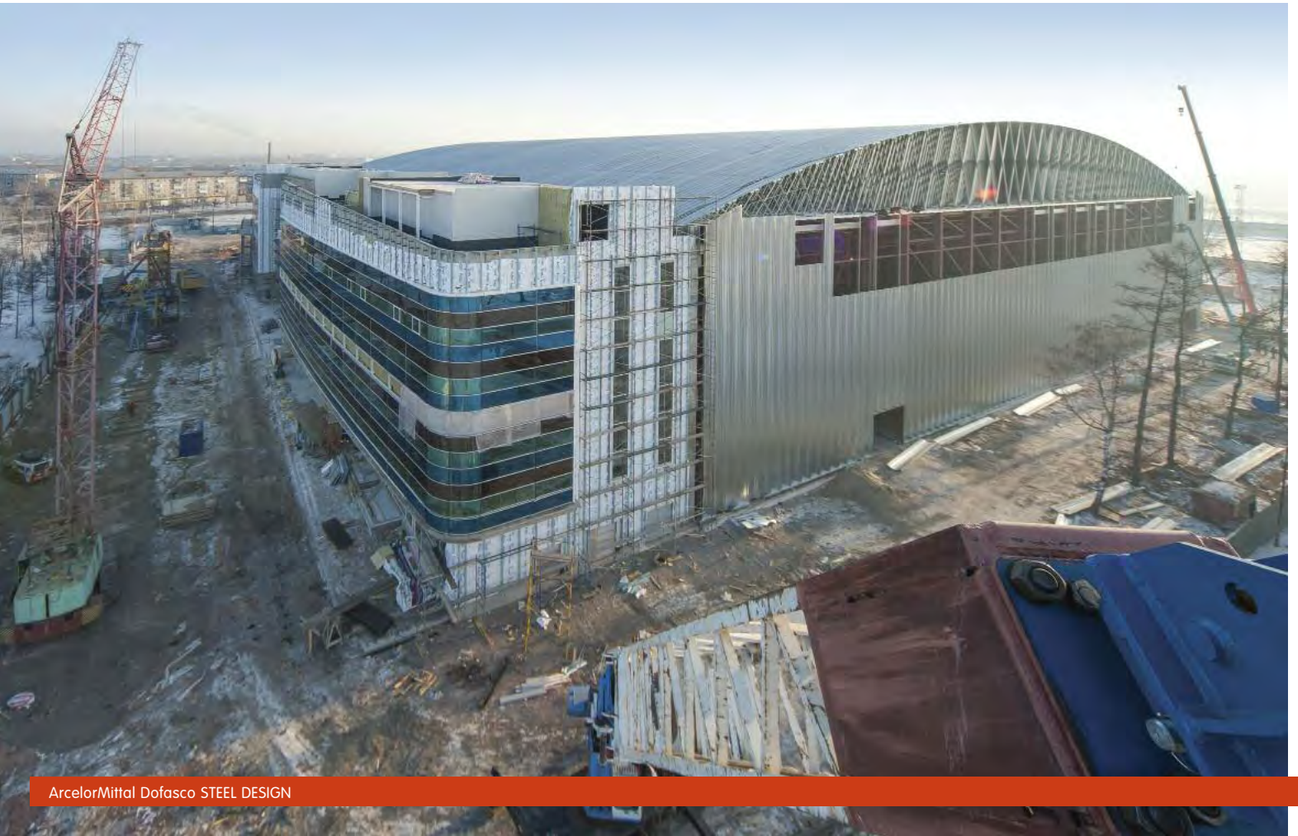
Enter the Russian Ministry of Sport and a general contractor for building construction, Mezhregionalnaya Torgovaya Assotsiatsia Ltd., (MTA). As with their newer hockey arenas, the Russians wanted an international-size indoor soccer stadium with the best sight-lines possible, without interference from support columns. This involved two significant challenges, building with unprecedented clear spans, and finding a qualified supplier, given no Russian suppliers were capable.

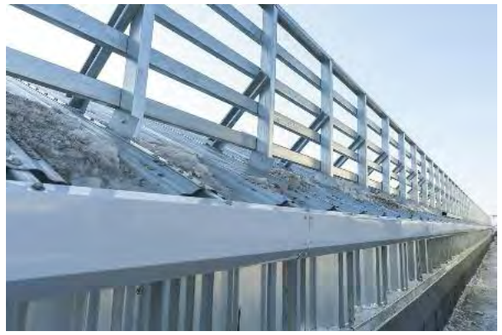
Behlen Industries LP, headquartered in Brandon, Manitoba, is Canada's largest manufacturer of steel building systems. After submitting a successful bid for the new stadium, Behlen has demonstrated once again its experience and expertise in taking over large and unusual international projects. It's also important to say that since the project started, Behlen has been dealing with MTA who erected this massive structure in Siberia.

Behlen's point man was Project Manager Andreas Riffel, based in Brandon, who speaks fluent Russian. He says, "The most challenging aspects of the project related to its size. Firstly we'd never fabricated a frameless convex-style building that big, with such large clear spans and secondly because of that we had to gain the trust of local authorities that it was even possible. It was unique for us, imagine for someone who never saw a structure like that, it's difficult to believe it's going to work!"

And that brings up the issue of testing and ArcelorMittal Dofasco (AMD)'s contribution besides supplying the steel itself. AMD conducted diaphragm shear testing on 3.05m to 7.62m (10 ft. to 25 ft.) panels connected as they would be in the field, loading them, measuring the deflection and then crunching the numbers to determine the shear capacity of the building. As Riffel points out, "The test results gave us the confidence that the stadium could be built and it would be able to withstand local snow loads, and we reassured local authorities accordingly."

Club *Enisey* Soccer players had to practice in small gymnasiums during the winter months. They really needed an international-size, indoor, soccer stadium with the best sight lines possible, without interference from support columns.





The stadium's overall size is 120m long x 115m wide (395 ft. x 377 ft.) It comprises a 4-storey admin. and commercial area with a 12m x 35m (40 ft. x 115 ft.) footprint. The soccer arena is 120m x 80m (394 ft. x 262 ft.) with a clear ceiling height of 23m (75.5 ft.) Z275(G90) galvanized steel is used throughout for sidewall panels 1.925mm (0.0758"), end wall panels 1.31mm (0.0516"), roof 2.38mm (0.0937") and the ceiling is a mix of 2.38mm (0.0937") and 1.93mm (0.0758"). The largest roof and ceiling panels had a rolled dimension of approximately 1m x 10m (3.28 ft. x 32.8 ft.).

The project took Behlen a year-and-a-half from first negotiations to final delivery. That becomes impressive when you know the actual fabrication and shipment occurred within a 4-month period and required 63 shipping containers. Overall completion was scheduled for August 2014. At the time of going to press Behlen had obtained a further five contracts for steel buildings in Russia and opened an office in Moscow.

Natural ceiling, providing a bright clean interior, allows for fewer light units and lower energy bills. Natural ceiling means no exposed roof trusses, while providing a bright clean interior with high reflectivity. In this case the ceiling panels are 1.93mm (0.0758") Z275(G90) galvanized panels. The structural red iron in the photo is wind bearing.

CORR-SPAN technology delivers lower energy costs due to its uniquely versatile roof system. The CORR-SPAN roof and ceiling system consists of corrugated roof and ceiling panels, joined by a lightweight, bolt together truss. The roof system provides a ventilated attic that lowers energy cost and eliminates the potential for wet insulation caused by condensation and leaks. The attic trusses can be designed for varying loads by simply changing the gauges.

Behlen's entire panel and wall system is manufactured from heavy gauge engineered panels with an exclusive roll form corrugation that provides structural integrity. The wall system uniformly transfers the load to the foundation – eliminating expensive heavy foundations, piers and piles.

DESIGN AND CONSTRUCTION TEAM

OWNER: Soccer Club "Enisey" [СКГАУ "ФК Енисей"]

ARCHITECT: PSO MIR Ltd. [ООО "ПСО МИР"] 495-965-34-47

STRUCTURAL ENGINEER: Urban Engineering 495-961-14-82

GENERAL CONTRACTOR: PSK Premium Ltd.
[ООО "ПСК Премиум"] 495-940-71-06

BUILDING ERECTOR: Stroikon Ltd. [ООО "СТРОЙКОН"]

BUILDING SUPPLIER:
Behlen Industries LP 204-728-1188 or 888-315-1035

PHOTOGRAPHER: Andreas Riffel

When Nader Ghassemlou, owner of ObjeKt Design Studio, purchased some Signal Hill property in Long Beach, California, he decided to design his own home. The area has spectacular ocean views, so Ghassemlou designed a tall, narrow steel-and-glass house that wouldn't block his neighbours' sightlines. Unfortunately, his project was met with hostility instead of gratitude. "The neighbourhood was up in arms over it. It's a neighbourhood of very traditional homes," Ghassemlou says.

Pre-painted steel cladding adds to sculptural exterior aesthetics

"But" he continued, "by law, they had no legal standpoint. They could not tell me I couldn't build a metal house."

He was inspired by the history of the neighbourhood, which used to be an industrial oil field. "Steel fit well within that context. It has an industrial tone to it. The angles of the house had to look precise," he says. "I chose steel for its mobility, aesthetics and durability. Durability was very important to me. On Long Beach, things rot and rust quickly because it's so close to the ocean."

The exterior of the two storey, 146.8m^2 (1,600 sq. ft.) home was corrugated aluminum/zinc coated steel (Galvalume® in Canada) cladding. Rigid-frame steel construction not only allowed for a flexible open-plan interior, but also accommodated a dramatic 25.9m (85 ft.) uninterrupted window wall that opened the residence to the garden and capturing the view of the city below and the ocean.

To make the home as maintenance-free as possible, Ghassemlou chose prefabricated and pre-painted steel. "The steel is guaranteed by the manufacturer for 20 years. The colour looks sharp. The pre-painted aluminum/zinc (Galvalume) coated steel looks the same now as it did when we started construction," he says. "I wanted to make sure the house never looked old. Plaster constantly needs maintenance." The construction was completed in 2005.

"It became a very successful project. The neighbours loved it, although at first they weren't sure. Some of them actually came over and apologized to me," says Ghassemlou. "It's much more aesthetically pleasing than they thought. If you have a good project, people will eventually appreciate it."

When the American housing market crashed a few years later, Ghassemlou was forced to sell his dream house. "We couldn't sustain it, so we had to let it go," he says. "We sold it within a week. It's already been sold twice."

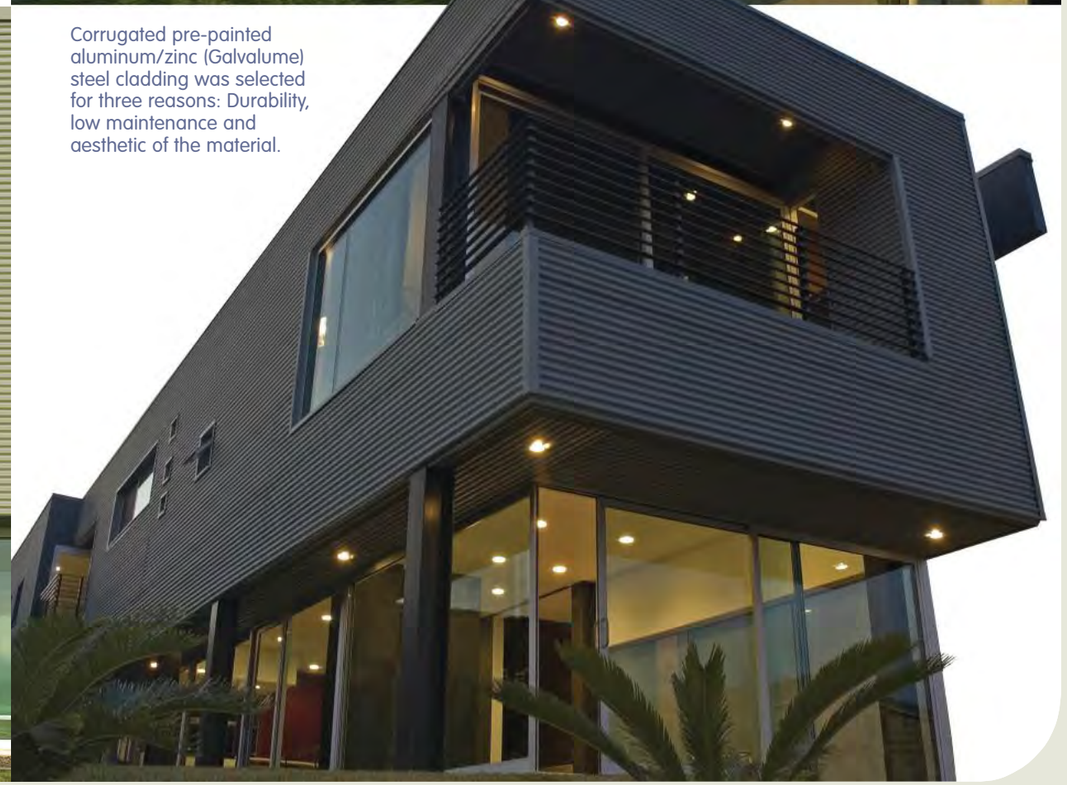
SPECIFICATIONS

AZ50 (AZM150) .45mm (.0179") 7/8" Corrugated Aluminum/Zinc coated steel (Galvalume® in Canada) conforming to ASTM A924/A79 (formerly ASTM792) Deep Nu-Wave Panels

Colour: Old Town Gray with the Cool Dura Tech® nt coating system

Ghassemlou designed a tall, narrow steel-and-glass house that wouldn't block his neighbours' sightlines.

Using a steel structure freed up the building from ordinary bearing wall construction which allowed us to float a second floor over a glass box. It also opened up the ground floor plan from having too many interior partitions, thus maximizing the view.



Corrugated pre-painted aluminum/zinc (Galvalume) steel cladding was selected for three reasons: Durability, low maintenance and aesthetic of the material.

DESIGN AND CONSTRUCTION TEAM

ARCHITECT:
ObjeKt Studio Nader Ghassemlou Assoc. AIA
562-857-4085

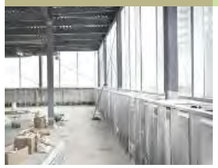
CONTRACTOR:
Rj Tavasci Design Construction
562-590-5222

STRUCTURAL ENGINEER:
Parlee Engineering Inc.
562-433-8882

CLADDING SUPPLIER:
AEP Span 800-733-4955

STEEL BUILDING SUPPLIER:
Steelway Building Systems 519-765-2244

PHOTOGRAPHER:
Wajid Drabu
310-464-0490



The gymnasium at George Brown College in Toronto was in desperate need of an upgrade. Originally built in the 1970s, the gym was due for an overhaul. "All the exercise equipment was stuck in the same small space with no natural light. The only people who used it were gym rats," says Yew-Thong Leong, Principal Architect with SSG Architecture. "We were asked to put an addition adjacent to the gym. The college's recreational needs had changed. They wanted a yoga studio, among other things."

Athletics Facility Enhancement Program – Steel was the obvious choice

One of the challenges the project posed was the need to add a modern addition to a historical building. "When you're building an addition to a historical building, you have to do it in such a way that it can be removed, and steel allows for that," Leong says. "The new building is entirely made of steel."

He adds that steel was also chosen for its strength and relatively light weight. "We left all the steel exposed. We wanted there to be a level of honesty about the design. We painted the steel pure white. It has a halo effect from the amount of light coming in – it simply glows."

Construction of the addition was completed a year ago. This latest addition was the third and final phase of the Athletics Facility Enhancement Plan.

"Steel doesn't look as heavy as concrete. The use of steel added a lighter feel to the space," says Leong. "The addition is amazing. It has incredible views and lots of natural light. It's been very well received."

The new space is a lot friendlier, and it's encouraged more students to work out at the college, he says. "The faculty bumped a few things around. In the end, the addition became the weight-training room, with a lot of cardio machines. The yoga studio was better suited to the original building," Leong explains. "The addition has brought out a different population. It's quite well done, and we're very happy about it."

The final of 3 phases of the 'Athletics Facility Enhancement Program', was the addition to a portion of the rooftop to the historic 200 King St. E. building for George Brown College

DESIGN AND CONSTRUCTION TEAM

CLIENT: George Brown College 416-415-5000

ARCHITECT: SSG Architecture Inc. 416-597-3822

STRUCTURAL ENGINEERS:
Milman and Associates 905-760-1020

GENERAL CONTRACTOR:
The Michael Thomas Group Inc. 905-738-1633

LIGHT STEEL FRAMING SUPPLIER:
Bailey Metal Products 1-800-668-2154

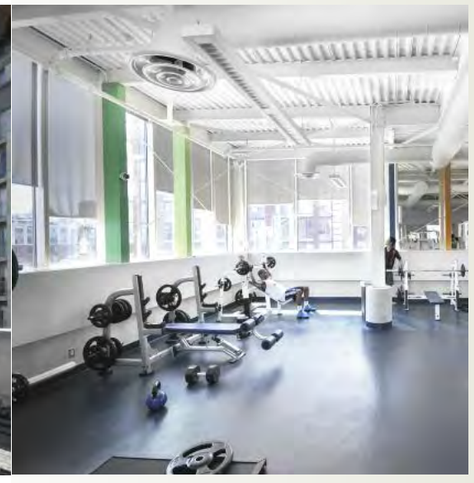
LIGHT STEEL FRAMING INSTALLER:
Orient Construction Limited 905-417-9515

STEEL DECK SUPPLIER: Canam Group 1-877-499-6049

STRUCTURAL STEEL CONTRACTOR:
Pengelly Iron Works 416-742-8465

STEEL CLADDING SUPPLIER: Vicwest 905-825-2272

The construction schedule dictated that the super structure would be erected during the fall and through the winter months. A dry construction method made winter installation a safe possibility. Prefabrication of components allowed for construction to continue safely while the existing building is occupied with staff and students.



Light steel framing was selected for its non-combustible construction properties, light weight and its ability to integrating with the new structure. Steel allowed for easily customizing all the members and elements to align with the in congruencies of the historic structure's differential grid spacing

FIRE RATING

Roof: 0

Floors: 2 hours existing

Walls: 45 minutes

FLOOR SPECIFICATIONS

Floor Span: 10.97m (36 ft.)

Total Floor Depth:
38mm (1.42") deck, no topping 529.55m² (5,700 sq. ft.)

ROOF SPECIFICATIONS

Roof Joist Span: 10.97m (36 ft.)

Roof Joist Depth: 460mm (18.1")

Roof Joist Spacing: 1.83m (6 ft.)

The addition provides space for the purpose of expanding the programs for the existing weight lifting and cardio facility which is currently housed in a window-less space within a 1970s gymnasium addition on the same floor. Once the existing facilities were vacated, they were renovated into a new cycle room and studios for movement classes.

ArcelorMittal Dofasco STEEL DESIGN

The Fall of 2014 saw the official opening of an 7,896.5m² (85,000 sq. ft.) 'SportsPlex' at St. Clair College, Windsor campus, in the southwestern corner of Ontario. The structure includes a triple gymnasium, a 929m² (10,000 sq. ft.) fitness centre, elevated walking track, workout studios, 12 team rooms, classrooms and more. Steel plays an integral role in both the functionality and appearance of the complex and targets several complementary objectives.

Steel is a Good Fit – for the Fit

John Fairley, VP College and Community Relations explains: "The facility will not only play host to the school's sports teams, but it will also be the key in recruiting athletes and, most importantly, it will give our students and fans a much better experience."

The project was led by two local firms – Glos Associates Inc. Architectural & Engineering Consultants and general contractor Oscar Construction Company Limited.

The Glos Associates design, which includes the largest gymnasium complex in Southern Ontario, is focused on providing today's and tomorrow's St. Clair students with a state-of-the-art training facility while celebrating past champions. The eye-catching main entrance rotunda atrium, with its scooped roof and glass façade leads into the connecting link/circulation space running the length of the building. That space will also serve as the 'Hall of Fame' displaying highlights of St. Clair's varsity history. Steel is very much in evidence – supporting and enhancing both areas as well as others throughout the complex. This includes structural steel, light steel framing, roofing panels and exterior wall cladding.

The substrate to the acoustic deck of the rotunda's and all other scooped roofs is 76.2mm (3") deep Z275 (G90) galvanized steel with a 2-coat Bone White PVDF paint. The facility's exterior cladding comprises PVDF painted AZM150 Galvalume steel sandwich panels coloured Beige, with a minimum R23 thermal resistance. The exterior surface is 0.76mm (.0299") and the interior surface being 45mm (.0179"), as well as, prefinished PX-10 (dry joint) 4mm (.0") Alpolic Composite material.

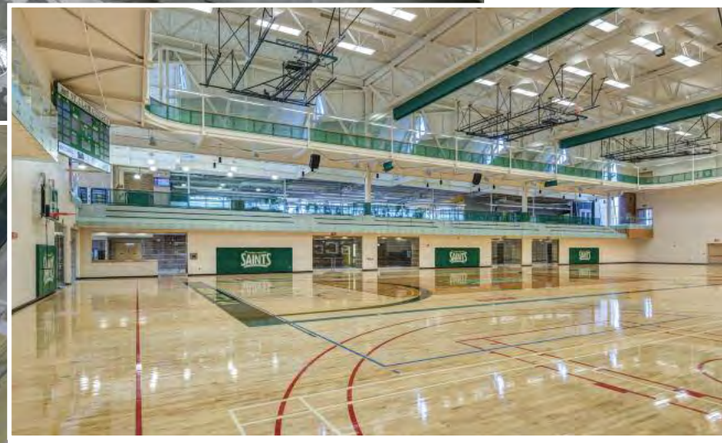
An unusual and visually arresting exterior effect was achieved by a series of light scoops above the connecting link giving a 'spinal column' impression leading from the scoop of the rotunda and providing indirect daylight for the length of the building. Their standing seam galvanized roofing panels match those of the rotunda. At night the

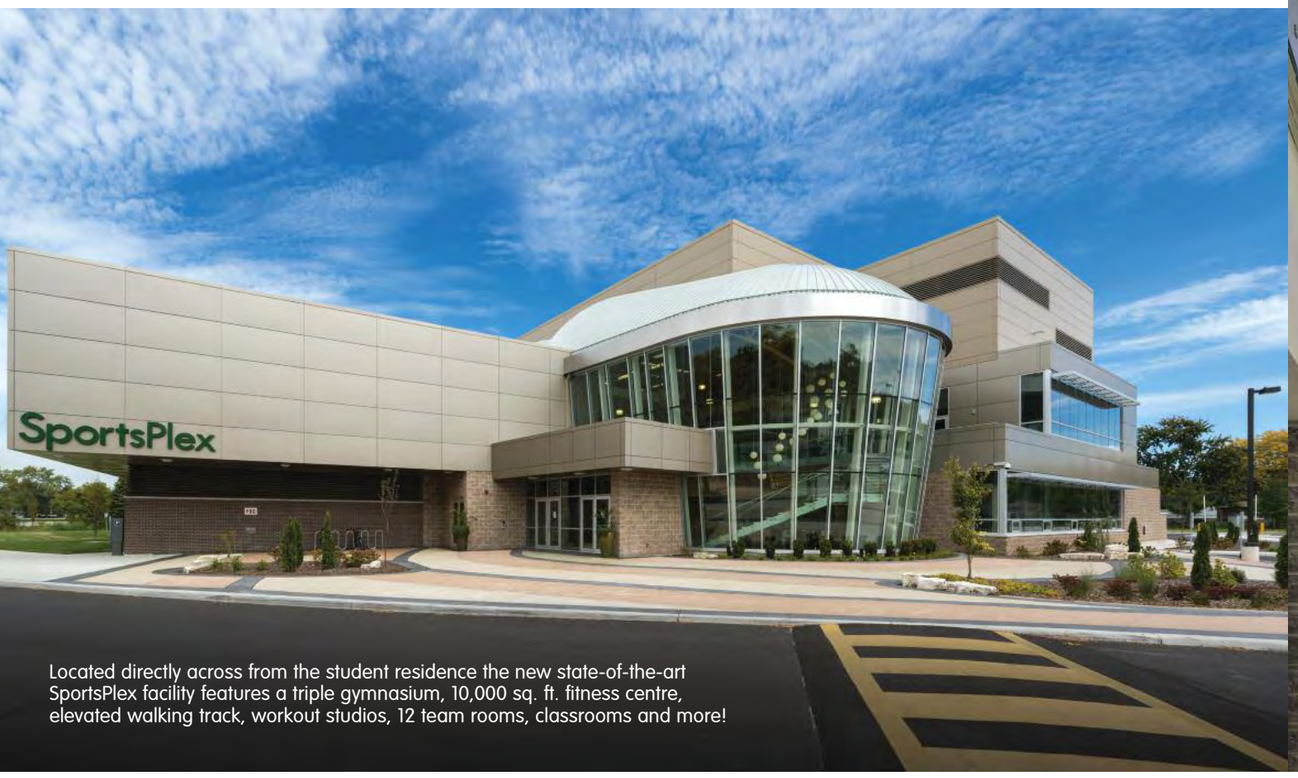
Continued on page 14

SPECIFICATIONS

All Steel sections to CAN/CSA – G40.21 Grade 350W
Steel Deck – Z275 (G90) galvanized steel
Composite Steel Panels – PVDF painted AZM150 Galvalume
Steel Standing Seam Roof – .61mm (.0239") AZM150 Galvalume
Light Steel Framing – Z275 (G90) galvanized
HSS sections – various sizes and dimensions
Painted surfaces – PVDF paint coating

The new facility offers unique services for students, including a fitness centre, complete with the latest gear for staying fit. It features indoor elevated walking tracks, perfect for maintaining cardio health as well as three large gym facilities. Numerous community programs are also offered as well as yoga, fitness, personal training, strength and conditioning classes.





Located directly across from the student residence the new state-of-the-art SportsPlex facility features a triple gymnasium, 10,000 sq. ft. fitness centre, elevated walking track, workout studios, 12 team rooms, classrooms and more!

DESIGN AND CONSTRUCTION TEAM

ARCHITECT: Glos Associates Inc. Architectural + Engineering Consultants 519-966-6750
GENERAL CONTRACTOR: Oscar Construction Company Ltd 519-737-0350
STRUCTURAL STEEL SUPPLIER & INSTALLER: AC Metal Fabricating Limited 519-737- 6007
GYMNASIUM ROOF DECK SUPPLIER: Metal Dek Group, a unit of CSI 800-554-5421
ROOF DECK SUPPLIER: Epic Metals Corporation 412-351-3913
ROOF DECK INSTALLER: AC Metal Fabricating Ltd. 519-737-6007
STEEL STANDING SEAM ROOF SUPPLIER: Firestone Metal Products 1-888-292-6265
STEEL STANDING SEAM ROOF INSTALLER: Empire Roofing 519-969-7101
LIGHT STEEL FRAMING INSTALLER: Trojan Interiors 519-979-7800
ALUMINUM COMPOSITE PANEL SUPPLIER & INSTALLER: ACMpanelworx 519-979-7800
COMPOSITE STEEL PANEL SUPPLIER: Metl-Span® 519-446-2570
COMPOSITE STEEL PANEL INSTALLER: Empire Roofing 519-969-7101

The Hall of Fame Corridor showing curved HSS roof trusses, scooped Z275 (G90) galvanized deck and the 508mm x 304.8mm x 12.7mm (20" x 12" x .5") tube framing across the atrium.

ArcelorMittal Dofasco STEEL DESIGN

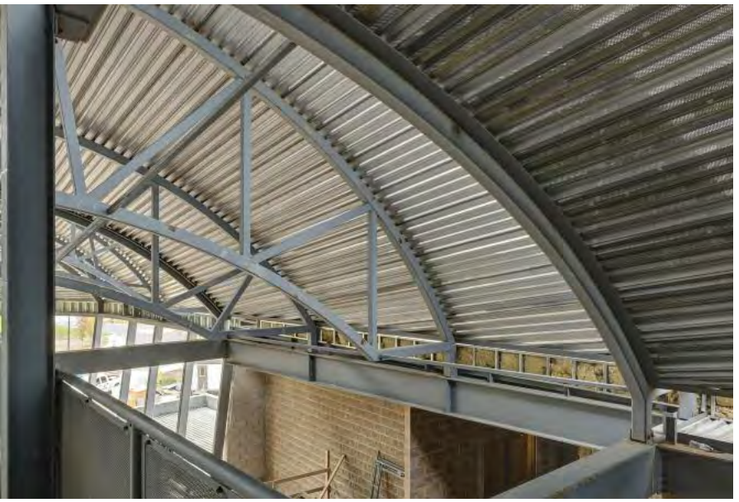
Continued from page 13

The substrate to the acoustic deck of the rotunda and all other scooped roofs is 76.2mm (3") deep Z275 (G90) galvanized steel with a 2-coat Bone White PVDF coating.

scoops enhance the building's visual appearance through programmable LED up-lighting.

Roof scooping is supported by curved hollow structural sections (HSS) 203mm x 101.6mm x 6.35mm (8" x 4" x .25"), and across the atrium 508mm x 304.8mm x 12.7mm (20" x 12" x .5").

College President Dr. John Strasser says the idea of a new, state of the art sports facility was first considered 10 years ago and, when Glos & Associates presented their concept, "We said right away it was what we wanted if we could finance it." The $25-million+ project was funded with a $7.5 million government infrastructure grant and around $10 million over 10 years in student contributions, with the remainder coming from private donations. It took two years to complete and came in on time and under budget.



SEMINAR

Design in Cold Formed Steel

For locations and dates, visit the CFSEI Canada web site at www.cfsei.ca

The objective of this seminar is to bring the participant up-to-date with the current design provisions contained in CSA Standard S136-12 North American Specification for the Design of Cold-Formed Steel Structural Members, highlighting significant changes from the previous edition along with numerous illustrative examples. Also, the latest editions of the AISI North American Design Standards for Cold-Formed Steel Framing will be reviewed since these design standards are referenced by CSA S136 for use in Canada. Anyone involved in the design of cold formed steel structural members should plan to attend. This seminar will provide a quick and effective means of learning about the latest edition of CSA S136. The speakers will be Dr. R.M. Schuster, P.Eng., University of Waterloo, and Dr. S. R. Fox, P.Eng., Canadian Sheet Steel Building Institute.

This seminar is organized by the Cold-Formed Steel Engineers Institute Canada, a not-for-profit organization created solely to promote the use of cold formed steel in Canadian building construction through education. To learn more about the CFSEI and to register for the seminar, go to www.cfsei.ca

COLD-FORMED STEEL ENGINEERS INSTITUTE CANADA

Restoring, Renewing and Innovating

Between 2011 and 2016, ArcelorMittal Dofasco is making $700 million in new capital investment in both primary (steelmaking) and finishing facilities.

Reinvesting in our assets has been a common theme in ArcelorMittal Dofasco's history. From taking a chance on producing tin in the 1920s, to being the first in North America to invest in oxygen steelmaking, to our more recent efforts to increase our Electric Arc Furnace's capability to accept varying ratios of scrap and liquid iron, we have a long history of continuously improving our facilities through ingenuity and investment. Today, there are three major active projects in the Finishing areas of our operations, including:

- No. 6 Galvanize Line ($120 million)
- No. 3 Temper Mill ($33 million) and, the most recently announced –
- No. 4 dual pot Galvanize and Galvalume Line ($55 million).

On the Primary side, we have also begun an $87 million project to restore our No. 2 and No. 3 Coke Plants.

Looking back, in 2010, we wrapped up a $145 million investment with our primary optimization project that saw the addition of pulverized coal injection in Ironmaking, the increase of hot metal usage in the Electric Arc Furnace and the restart of the No. 3 Blast Furnace.

These investments are a testament to the strong performance of ArcelorMittal Dofasco and our ability to execute projects within scope, on schedule and on budget.

New dual pot Galvanize – Galvalume Line

The most recent Finishing project to be announced is the dual-pot configuration for No. 4 line, with the capability of producing both Galvalume and Galvanize products. Our planned completion is early 2016. Together, the No. 4 Galvanize/Galvalume and No. 6 Galvanize lines will eventually replace our No. 2 Galvanize and No.1 Galvalume lines while the No. 3 Temper Mill will replace both the 2-66" and 5-56" Temper Mills.

Our revamped No. 4 line will provide ArcelorMittal Dofasco and our customers with a world class line capable of producing high quality Galvalume and Galvanize products, featuring pre-paint quality with superior surface and flatness. The line will be capable of producing a wide range of thicknesses including one of the heaviest thicknesses for Galvalume available in North America as well as a broad width capability.

Restoring

"Our restorative work is well underway," says Sean Donnelly, President and CEO. "The goal is to continuously improve our safety, efficiency and environmental performance. There isn't an end to our efforts as we feel we can always improve, even if those improvements come in smaller and smaller increments. To do this we have a number of approaches including one time capital improvements, improved operating practices as well as normal annual repair, maintenance and capital investment budgets.

Lightweight Steel Framing

Although "Steel" may conjure up images of a heavy, cumbersome material for construction, Lightweight Steel Framing (LSF) from coated sheet steel products is just the opposite. Cold-formed sheet steel is an easy to handle, economical, non-combustible, high quality alternate to more traditional framing materials. Steel framing offers a strong, accurate, dimensionally stable and durable framing system. Lightweight steel framing will appeal to anyone interested in building construction.

Steel has been in use for over 100 years in the North American Construction market. While it is often associated with skyscrapers and bridges, steel is emerging as the material of choice for industrial, commercial and institutional (ICI) buildings. Lightweight steel framing (LSF) is an increasing popular choice in low to medium rise structures such as schools, shopping malls, box stores, stacked row houses, hotels, assisted care residencies and office buildings. LSF is used in the wall, floor and roof assemblies in buildings from one to six stories in height. LSF alone can provide all necessary structural elements or it can be used in combination with other materials for greater building diversity and scope.

EDITORIAL INQUIRIES

We would like to hear from you! If you have comments about this issue or a project you would like to see in an upcoming issue of ***Steel Design***, please send a description of the project, including photographs, to: The Editor, Steel Design,
1039 South Bay Road,
Kilworthy, ON P0E 1G0.
Or email: davidfollis@vianet.ca

ArcelorMittal

Build on Success from top to bottom

Designing and building with ArcelorMittal Dofasco steel makes sense in today's world. Consider the bottom line. Consider the environment. And consider quality.

Steel provides the most desirable and cost-effective combination of strength and design flexibility. ArcelorMittal Dofasco steel has industry leading recycled content and is the only steel recognized by Environment Canada's Environmental Choice Program.

Light steel framing, cladding and roofing. Superior performance from the inside out.

Solutions in Steel™

transforming tomorrow

Asthma.ca
Asthma Society of Canada

Building products made with ArcelorMittal Dofasco steel promote a healthy indoor air environment.

EcoLogo

ArcelorMittal Dofasco steel is certified to EcoLogo® standard CCD-150 "Steel for Use in Construction Products"

Recycled