Edmonton Humane Society Colourful, Inviting and Cost Efficient

Light steel framing is a proven technology and reflects the superior strength and consistency of steel. Steel, being inorganic, does not support the growth of mold or give off gas, thus contributing to excellent indoor air quality. It is endorsed by the Asthma Society of Canada.

EDMONTON HUMANE SOCIETY

EDMONTON, ALBERTA

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DESIGN AND CONSTRUCTION TEAM

PRIME ARCHITECT:
Number TEN Architectural Group

DESIGN ARCHITECT:
George Miers and Associates Architecture and Planning

CIVIL ENGINEER:
Al-Terra Engineering

LANDSCAPE ARCHITECT:
EIDOS Consultants Incorporated

STRUCTURAL ENGINEER:
Crosier Kilgour & Partners Ltd.

MECHANICAL AND ELECTRICAL ENGINEERS:
SMS Engineering Ltd.

CONTRACTOR:
Chandos Construction

STEEL SUPPLIER: Roll Form Group

STANDING SEAM ROOF & WALL CLADDING:
Midform Custom Flashings

STRUCTURAL STEEL FRAMING:
Rampart Steel Ltd.

LIGHT STEEL FRAMING SUPPLIER:
Steelform Building Products

LIGHT STEEL FRAMING INSTALLER:
KDH Drywall

PHOTOGRAPHY: Jeff Moroz and Ken Laidlaw

The use of steel, which was used extensively throughout the 3,395m2 (43,000 sq. ft.) facility, not only met that intention, but added to the overall appeal. Five different colours of pre-painted steel were used for the exterior wall and roof cladding presenting a showcase that is attractive and inviting. Miers explains that the client was initially interested in steel because of its longevity and relative cost efficiency. "A steel clad facility in this climate made sense and was also a responsible material selection given steel's high recyclable content and the client's desire to be 'green'. In fact, the concept of using a highly recycled material to clad a facility dedicated to 'recycling' domestic animals into loving and caring homes seemed philosophically appropriate."

The overall Campus Master Plan encompasses one of the most comprehensive Domestic Animal Care Facility programs ever undertaken, as it includes not only traditional adoption, intake and holding functions, but also a comprehensive veterinary medicine area, an educational classroom area, a 456m2 (5,000 sq. ft.) training pavilion called the Enrichment Centre, future boarding and doggie day care services. There is even a site for a future wildlife facility.

Wind bearing steel studs supplied by Steelform Building Products were used for the exterior walls of the building and Midform Custom flashings and Installations Inc. installed the corrugated steel panels for the exterior siding, soffit and Colonnade roofs. All material is ArcelorMittal Dofasco's prepainted galvalume steel supplied by Roll Form Group. Miers explains why so many different colours were used. "This is a big building and given an initial 'cost' goal to keep the overall form somewhat simple, we felt that it was important to break down the structure's mass as much as we could and create interest, as well as a sense of fun and playfulness. In addition, the facility has a number of different entrances, including the Main Adoption Centre, the Education/Enrichment Centre, a Public Intake Entrance, as well as staff entrances, and the break in colours coincides in part with these different components and is consistent with the overall master plan goal.

The new Edmonton Humane Society is an exceptional community services project. George Miers emphasizes, "One of the unique features of the project, which hopefully is a harbinger of things to come, has been the personal commitment – beyond what you normally see on a construction project". Bob Rehm, Project Manager, Chandos Construction, the General Contractor on the project agrees, "We've gone the extra mile for this client to provide the services they require and keep costs in line."

Number TEN Architectural Group, the prime architect on the project, emphasizes the many advantages of using light steel framing for this project. "It provides flexibility, affordability and is advantageous to the construction schedule." Bob Rehm agrees. "I've always been a fan of steel construction. It is flexible and easy to use, it's fire resistant and equally important – steel has longevity."

Interior Light Steel Framing (LSF)
.44mm (.0175") Z120 (G40) COATING:
63.5mm x 31.75mm flange
(2.5" x 1.25") – 250S125-18 73m (240')

92mm x 31.75mm flange
(3.625" x 1.25") – 362S125-18 5532m (18,150')

92mm (3.625") track –
362T125-18 1158m (3,800')

92mm (3.625") deep track –
132M362T200-18 475m (1,500')

152.4mm (6") stud x 31.75mm (1.25") flange –
600S125-18 14759m (48,420')

152.4mm (6") deep track –
600T125-18 2103m (6,900')

152.4mm (6") deep track –
600T200-18 975m (3,200')

203.2mm (8") track –
800T125-18 30.5m (100')

.83mm (.033") Z180 (G-60) COATING:
63.5mm x 31.75mm (2.5" x 1.25") flange –
250S125-33 91m (300')

203.2mm (2.5") Track –
250T-125-33 91m (300')

92mm (3.625") stud x 31.75mm (1.25") flange –
362S125-33 1213m (3,980')

92mm (3.625") track –
362T125-33 61m (200')

152.4mm (6") stud x 31.75mm (1.25") flange –
600S125-33 1673m (5,490')

152.4mm (6") stud x 41.3mm x (1.625") flange –
600S162-33 686m (2.250')

152.5mm (6") track –
600T125-33 793m (2,600')

152.4mm (6") deep track –
600T200-33 158.5m (520')

STRUCTURAL LOAD BEARING
1.12mm (.044")Z275 (G90) coating,
Grade 230Mpa (33ksi)
152.4mm (6") stud x 41.3mm (1.625") flange –
600S162-43 128m (419')

152.4mm (6") deep track –
600T200-43 61m (200')

1.37mm (.054") Z275 (G90) coating,
Grade 340Mpa (50ksi)
152.4mm (6") stud x 41.3mm (1.625") flange –
600S162-54 1190m (3,905')

152.4mm (6") track –
600T125-54 366m (1,200')

152.4mm (6") deep track –
600T200-54 244m (800')

1.73mm (.068") Z275 (G90) coating,
Grade 340Mpa (50ksi)
152.4mm (6") stud x 41.3mm (1.625") flange –
600S162-68 633m (5,358')

152.4mm (6") track –
600T125-68 91m (300')

152.4mm (6") deep track –
600T200-68 305m (1,000')

2.59mm (.102") Z275 (G90) coating,
Grade 340Mpa (50ksi)
355.6mm (14") joist x 63.5mm (2.5") flange –
140S250-97 29.3m (96')

Steel framing members in a variety of standard shapes and sizes and in varying steel thicknesses have been used to accommodate virtually all structural requirements.

Light steel framing systems (LSF) allow ease in construction through flexibility in detailing to and adapting to architectural requirements, thus making it an obvious choice.

Steel roofing and cladding allow simplicity in detailing and installations while providing simple, elegant and clean facades.

Five different colours of pre-painted steel were used for the exterior wall and roof cladding – presenting a showcase that is attractive and inviting. ArcelorMittal Dofasco's prepainted galvanized steel with application specific paint systems' proven field performance contributed to the overall effect and helped meet the project's objectives – durable, visually interesting buildings meeting all design, cost and performance criteria.

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