



## WILMOT RECREATION COMPLEX

WILMOT, ONTARIO

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ArcelorMittal Dofasco Steel Design, 2009)

### DESIGN AND CONSTRUCTION TEAM

**OWNER:**  
Township of Wilmot

**ARCHITECT:**  
GB Architect Inc.

**PROJECT MANAGEMENT:**  
Jackson Barill Management Inc.

**STRUCTURAL DESIGN:**  
Dan Barill

**STEEL BUILDING SYSTEM (SBS)  
CONTRACTOR:**  
Vic's Contracting

**STEEL BUILDING SUPPLIER:**  
BEHLEN Industries LP

**STEEL DECK SUPPLIER:**  
Vicwest

**STEEL DECK INSTALLER:**  
CSM Canadian Sheet Metal

## Convex Steel Building means significant savings for Township of Wilmot Recreation Complex



The convex CORR-SPAN steel building system provides for clear uninterrupted views and significant energy savings.

The township of Wilmot in Waterloo County, Ontario has an arena with a history – a former World War II aircraft hangar from Port Albert. The Municipality wanted a new arena that retains that same 'feel'. The solution – with additional significant benefits – was a CORR-SPAN® Convex steel building system (SBS) from BEHLEN Industries LP.

The overall project includes a two ice pad arena with change rooms, offices, kitchen etc., plus seven soccer fields and a community centre.

Wilmot's Mayor Wayne Roth tells us, "For the ice pad arena facilities we chose the BEHLEN Industries LP CORR-SPAN convex steel building system (SBS) not only because of the competitive up-front costs, but also because, when we look 30 years out, there are significant energy savings that put us way ahead of a conventional structure. We have R50 in the roof and R40 in the walls. As well, we like the cleaner interior design with no columns and beams."

The roof is 114.3mm (4.5") corrugation 2.28mm (.090") ArcelorMittal Dofasco Z275 (G90) galvanized. It is clad with prepainted 2.28mm (.090") Z275 (G90) galvanized coloured QC18305 Stone Grey.

Paul Jackson of Jackson Barill Management who managed the project and handled structural design adds, "The arena has a clear span 75.6m wide x 64m long (248 ft. wide by 210 ft. long) with a 7.93m (26 ft.) eaves height. Our company specializes in high R-value buildings.

The Wilmot people talked to their counterparts in Milverton re their similar arena structure and learned that the energy savings alone were paying for the building."

Jackson adds that from a construction standpoint the cost effectiveness is contributed to by walls, roof and ceiling being erected at the same time, so when halfway up the building length, the sub-trades can start working inside. Overall he thinks savings of around \$200,000 were achieved. With foundations and site work started in the Fall of 2006, the Complex was completed in late 2007. He continues, "The erection time was 10 weeks, which, for a building this size is fantastic. The Wilmot Complex is the largest convex building in North America and at the time of construction was the second largest in the world."

### Specifications:

#### Side Walls:

190.5mm (7.5") corrugation, 2.28mm (.090") prepainted Z275 (G90) galvanized, coloured QC18305 Stone Grey.

#### Roof:

114.3mm (4.5") corrugation, 2.28mm (.090") Z275 (G90) galvanized.

#### Interior Wall Liner:

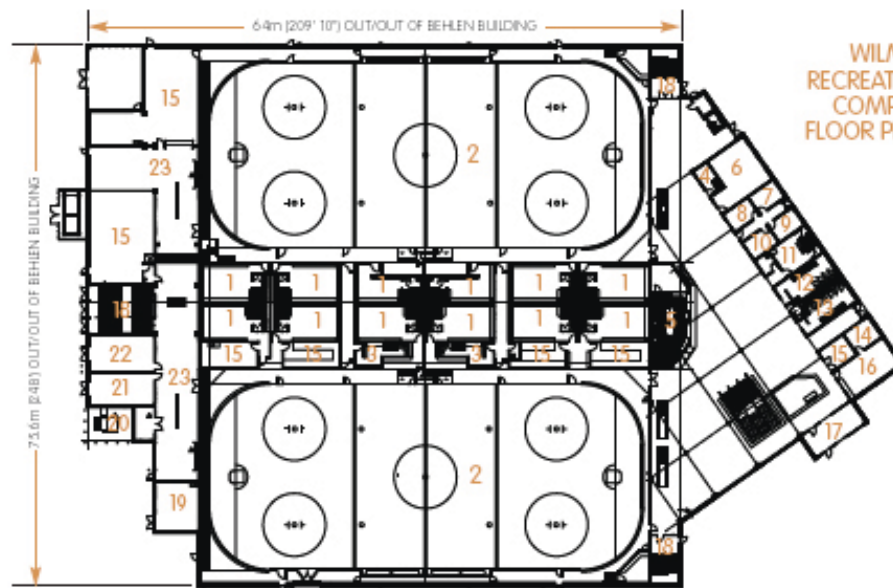
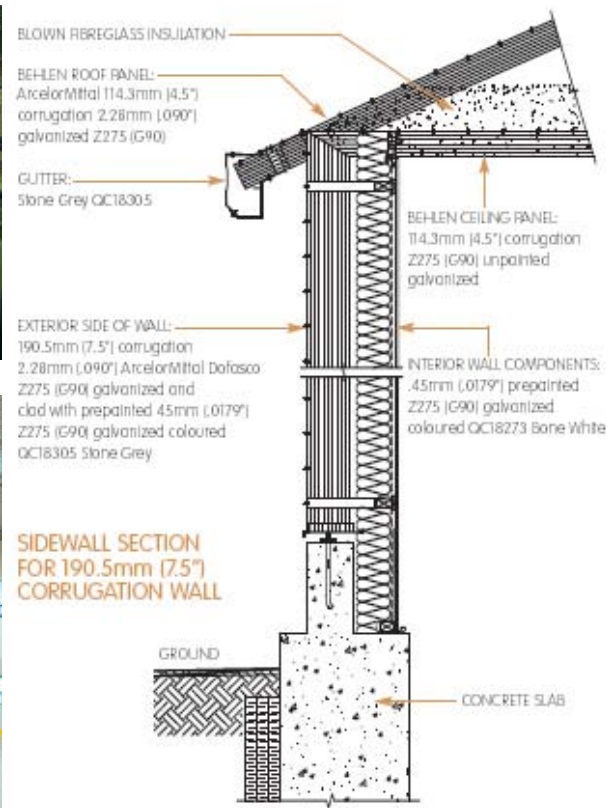
114.3mm (4.5") corrugation, .45mm (.0179") prepainted galvanized, coloured QC18273 Bone White.

#### Interior Ceiling:

Unpainted Z275 (G90) galvanized.

*"We chose the Behlen Industries CORR-SPAN steel building system (SBS) not only because of the competitive up-front costs, but also because, when we look 30 years out, there are significant energy savings that put us way-way ahead of a conventional structure".*

Wilmot Mayor, Wayne Roth



- WILMOT RECREATION COMPLEX FLOOR PLAN**
1. Dressing Rooms
  2. Ice Surfaces  
61m x 26m (200' x 85')
  3. Refs' Room
  4. Concession Storage
  5. Concession
  6. Meeting Room
  7. Aqua Swim
  8. Figure Skating
  9. Minor Soccer
  10. Minor Hockey
  11. Staff Room
  12. Men's Washroom
  13. Women's Washroom
  14. Administration Storage
  15. Storage
  16. Administration Office
  17. Vestibule
  18. Stairs
  19. Soccer Storage
  20. Transformer Vault
  21. Electrical Room
  22. Mechanical Room
  23. Resurface Area



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