



ARID-Ice™ ♦ ARID-Dry™ Controlled Dehumidification

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Load Estimate Basis

Project Name:

1: Select Geographical Use Category

List

Arena Location City

3 Season or 4 Season Operation as Ice Arena?

2: List Load Items

List

Arena Dimensions	<input type="text"/>	Approximate size of arena
Ice Sheet Size	<input type="text"/>	Studio, NHL, Olympic, etc.
Number of Exterior Man-Doors	<input type="text"/>	Doors opening to outdoors.
Number of Roll-Up Doors	<input type="text"/>	Assumes door open about ten minutes per hour
Number of Interior Man-Doors	<input type="text"/>	Doors opening to team-rooms, lobby, etc.
Damper Area to Outside (SqFt)	<input type="text"/>	This item addresses leaks through <u>closed</u> damper.
Building Integrity (1=Tight, 10=Loose)	<input type="text"/>	See Note Below
Skaters	<input type="text"/>	
Spectators	<input type="text"/>	Spectators may be ignored for low-occupancy design basis.
Other Loads (Pounds/Hour)	<input type="text"/>	
Design Outdoor Air Ventilation	<input type="text"/>	List minimum ventilation volume required, if any.

Guideline:

1 = Tight building. Well sealed, perfect door gaskets, and location in northern state. and other adjacent areas.
Well sealed doors to locker rooms . No exhaust fans or dampers in walls.

5 = Average Construction. Metal or block walls, weatherstripping on doors, Doors to adjacent areas.
One exhaust fan with well sealing dampers. (Exhaust fan may not operate continuously)

10 = Extremely loose building. Daylight visible through gaps, poor or no weatherstripping on doors,
Exhaust fans in walls with leaky, poorly maintained dampers. Arena openings to unconditioned spaces,
locker rooms, lobby, etc. Located in Southern state.

Assumptions:

Space Control Level of 50F to 60°F and

35°F to 40°F Dewpoint

No ventilation is included in the internal loads

Colder Rinks (50°F or Lower) may require more capacity

MS-Series Units are for 100% Recirculation

3: Services Available

Voltage

Gas Pressure

4: Intended Configuration

Unit Location (Indoor or Outdoor)