



## SINGLE ICE RINK EQUIPMENT BUDGET

**BUDGET**  
Rink Size: 200' x 85' x 28'  
Date: 5/19/2023

REFRIGERATION/MECHANICAL OPTIONS		PRICE
1 (1)-200 HP WATER-COOLED HIGH EFFICIENCY CHILLER COMPLETE WITH 2 SCREW COMPRESSORS, FLOODED EVAPORATOR, DUAL REFRIGERANT CIRCUITS, ELECTRONIC EXPANSION VALVES, & MICROPROCESSOR CONTROL PANEL		
2 INDUSTRIAL COOLING TOWER, COMPLETE WITH GALVANIZED STEEL TOWER STAND, VFD CONTROLLED TOWER FAN, AND CONTROL MODULE		
3 CONDENSER WATER MECHANICAL SYSTEM: COMPLETE WITH CIRCULATION PUMP, PIPING, VALVES, PRESSURE GAUGES, CONNECTING PIPING, HEAT TRACE, PIPE INSULATION, AND PVC JACKETING		
4 VARIABLE FLOW RATE PUMP STATION: COMPLETE WITH (2) GLYCOL PUMPS, ELECTRICAL PANEL, STARTERS, HAND/OFF/AUTO SWITCHES, WYE STRAINER, EXPANSION TANK, AND VALVES		
5 SECONDARY REFRIGERANT FIELD MATERIALS INCLUDING ALL CONNECTING PIPING BETWEEN CHILLER AND PUMPSKID, GAUGES, THERMOMETERS, PIPE HANGERS, INSULATION, AND PVC JACKETING		
6 SUBSOIL MECHANICAL: PUMP, HEAT EXCHANGER, CONNECTING PIPING, PRESSURES GAUGES, AND CONTROLS		
7 SNOW MELTING PIT GRID: 2" SCH 40 STEEL PIPING COMPLETE WITH MOUNTING APPARATUS		
8 SNOW MELTING PIT HEAT EXCHANGER, CONNECTING PIPING, AND CIRCULATION PUMP		
9 ETHYLENE GLYCOL SECONDARY FLUID CHARGE		
MECHANICAL TOTALS		\$ 531,589
B 200' x 85' x 28' RINK FLOOR		PRICE
1 FROST SHIELD SUB SOIL HEATING SYSTEM: 2" SDR 11 HEADERS, 1" SDR 11 TUBING SPACED 18" C/C. ALL CONNECTIONS MADE USING FUSION WELDING TECHNOLOGY		
2 PLACEMENT AND LEVELING OF FINES OVER SUB-SOIL HEATING SYSTEM		
3 .3 EPS RIGID RINK FLOOR INSULATION AND VAPOR BARRIERS		
4 100' RUN OF 6" SDR 11 TRANSMISSION MAINS COMPLETE WITH URETHANE INSULATION AND PVC JACKETING		
5 FUSION_ICE_4_OC RINK PIPING SYSTEM COMPLETE WITH 6wRR" DIAMETER HEADER, TUBING, AND ALL INSTALLATION HARDWARE		
6 5" THICK CONCRETE RINK SLAB: SUPPLY, PLACEMENT, FINISH, TESTING, AND CURING		
7 CONCRETE RINK FLOOR MATERIALS: #4 REBAR SPACED EVERY 12" LENGTH X WIDTH, 6X6 WIRE MESH, WIRE TIES, EXPANSION JOINT, AND SEALANT		
RINK FLOOR TOTALS		\$ 582,557
C DASHERBOARDS		PRICE
1 TITAN_SERIES_STEEL DASHERBOARDS COMPLETE WITH 1/2 POLY WHITE FACING, 1/2 POLY COLOR KICKPLATE, 3/4 POLY COLOR CAPRAIL		
2 6' x 5/8" TEMPERED GLASS AT RINK ENDS, 6' x 1/2" TEMPERED GLASS ON BLEACHER SIDE, 6' x 1/2" TEMPERED GLASS ON PLAYERS BOX SIDE. GLASS ON RINK ENDS IS SUPPORTED BY 2 PIECE ALUMINUM HOOK MOUNTING SYSTEM GLASS ON RIDE SIDES IS SUPPORTED BY 2 PIECE ALUMINUM HOOK MOUNTING SYSTEM		
3 10 TOTAL ACCESS GATES AND (0) 5' HINGED EQUIPMENT DOORS		
4 78' OF PLAYERS, PENALTY AND SCOREKEEPERS BOXES COMPLETE WITH 36' OF DIVIDER PANELS, 78' OF Elevated PLAYERS BOXES INCLUDING RUBBER MATTING, POLY PLAYERS BENCHES WITH STEEL PEDESTALS AND STANDARD SCORERS TABLE		
5 INCLUDES CAST IN PLACE DASHER ANCHORS		
6 BLACK NYLON ABOVE GLASS NETTING SYSTEM. INCLUDES NETTING AT RINK ENDS AND SPECTATOR SIDE. COMPLETE SYSTEM WITH ALL MOUNTING HARDWARE AND CONDUIT		
DASHERBOARD TOTALS		\$ 270,862
D DEHUMIDIFICATION		PRICE
1 5,800 CFM DESICCANT DEHUMIDIFICATION SYSTEMS WITH CTR DAMPER TO ALLOW FOR 100% OUTSIDE TREATED AIR TO MEET ASHRAE 62 GUIDELINES FOR FRESH AIR		
2 SINGLE INDOOR AIR QUALITY (IAQ) SYSTEM		
DEHUMIDIFICATION TOTALS		\$ 109,572
E GENERAL CONDITIONS AND ICE PAINTING		PRICE
1 EQUIPMENT UNLOADING/INVENTORY		
2 SHOT FLOOR FOR ELEVATIONS		
3 CLEANUP (DUMPSTERS BY OTHERS)		
4 WHITE ICE PAINT - BASE COAT AND INCLUDES ICE MAKING FOR FIRST SKATEABLE ICE SHEET		
5 COLORED - PAINT FOR ICE MARKINGS AND GOAL CREASES		
6 TRAINING		
GENERAL CONDITION TOTALS		\$ 41,200
TOTAL PRICE: SECTIONS A, B, C, D, & E		\$ 1,535,780
F OPTIONS		PRICE
1 HEAT RECLAMATION SYSTEM: DISCHARGE GAS DESUPERHEATERS AND LIQUID TO LIQUID PLATE AND FRAME HEAT EXCHANGERS		\$ 40,000
2 ADD TO CONVERT REFRIGERATION PLANT FROM A FREON BASED SYSTEM TO AMMONIA BASED (ADD TO BASE)		\$ 400,000
3 DEDUCT TO CONVERT REFRIGERATION PLANT TO A FULLY SELF-CONTAINED AIR COOLED SYSTEM (SUBTRACT FROM BASE)		\$ (104,958)
4 DEDUCT TO CONVERT CONCRETE BASED FLOORS TO SAND BASED FLOORS (SUBTRACT FROM BASE)		\$ (180,000)
5 3/8" WHITE DASHER BACKING AROUND ENTIRE RINK (ADD PER RINK)		\$ 28,000
6 NEW PROPANE ICE RESURFACER BUDGET		\$ 130,000
7 PRE-OWNED PROPANE ICE RESURFACER BUDGET		\$ 60,000
8 GAS POWERED ICE EDGER		\$ 4,200
9 PAIR OF HOCKEY GOAL FRAMES INCLUDING NETTING AND FENDERS		\$ 1,400
10 RENTAL SKATES		\$ 85/PAIR
11 TRIPLE STATION SKATE SHARPENER		\$ 35,000
12 RECYCLED RUBBER FLOORING - INCLUDES ADHESIVE AND INSTALLATION		\$ 9/FT2
13 DUAL VULCANIZED RUBBER FLOORING - INCLUDES ADHESIVE AND INSTALLATION		\$ 25/FT3

Notes: Unless noted, all materials are quoted labor and materials with the installation performed by Everything Ice (EI) in accordance with the EI Specification Booklet provided and EI standard terms & conditions. Material only options are unloaded and installed by others under the optional supervision by EI at a prescribed per diem rate plus travel and living expenses. The installation charges are tabulated on a 7 day work week working up to 10 hours per day. Restricted work hours could result in added costs. Installation shall provide a finished ice rink with arena personnel trained in its operation. All domestic (lower 48 ) projects include shipping to the job site F.O.B. Factory. All quotes are good for 30 days and subject to change without notice beyond this period. Prices do not include costs for shipping, permits, fees, any applicable sales/use taxes, or provision for prevailing wages unless expressly stipulated. Standard payment terms apply: 50% at agreement, 45% prior to shipping, and 5% prior to ice making.

If, during the performance of the contract, the price of material, labor or transportation costs significantly increases, through no fault of the contractor, the price shall be equitably adjusted by an amount reasonably necessary to cover any such significant price increases. As used herein, a significant price increase shall mean any increase in price exceeding 2% experienced by contractor from the date of the contract signing. Such price increases shall be documented through quotes, invoices, or receipts. Where the delivery of material, labor or transportation is delayed, through no fault of the contractor, as a result of the shortage or unavailability of goods, materialmen or reasonable means of transportation, contractor shall not be liable for any additional costs or damages associated with such delay(s).

		<b>BUDGET</b> Rink Size: 200' x 85' x 28' Date: 5/19/2023
<b>SCOPE CLARIFICATIONS (X= EXCLUDED, INCL.=INCLUDED, N.A.=NON APPLICABLE, ALT.=ALTERNATE)</b>		
<b>GENERAL CONDITIONS</b>		
<input checked="" type="checkbox"/>	Permits	
<input checked="" type="checkbox"/>	Stamped drawings	
<input checked="" type="checkbox"/>	Sales taxes	
<input checked="" type="checkbox"/>	Shipping	
<input checked="" type="checkbox"/>	Site preparation, soil/civil engineer services as needed	
<input checked="" type="checkbox"/>	Soil stabilization as stipulated by soil engineer	
<input checked="" type="checkbox"/>	Site drainage and dewatering	
<input checked="" type="checkbox"/>	Debris/trash removal/dumpster	
<input checked="" type="checkbox"/>	Cost of generator if required for small tools	
<input checked="" type="checkbox"/>	Cost of electric through construction	
<input checked="" type="checkbox"/>	Ventilation and/or utility design for ice resurfacer room	
<input checked="" type="checkbox"/>	Adequate lighting, protection from water run off, snow removal	
<input checked="" type="checkbox"/>	INCL Provide training session to arena personnel and service contractor	
<input checked="" type="checkbox"/>	Proper rough grade elevation as specified in project drawings +/- 1"	
<input checked="" type="checkbox"/>	Rink perimeter concrete in place prior to rink floor construction. +/-1/8" over 10'	
<b>REFRIGERATION/MECHANICAL SYSTEMS</b>		
<input checked="" type="checkbox"/>	INCL Unloading/ Rigging and Placement of Chiller	
<input checked="" type="checkbox"/>	INCL Unloading/Rigging and Placement of Condenser/Cooling Tower	
<input checked="" type="checkbox"/>	INCL Water cooled chiller	
<input checked="" type="checkbox"/>	ALT Air cooled chiller	
<input checked="" type="checkbox"/>	INCL Evaporative Condenser/Cooling tower	
<input checked="" type="checkbox"/>	X Chemical water treatment	
<input checked="" type="checkbox"/>	INCL Ethylene glycol	
<input checked="" type="checkbox"/>	INCL PumpStat variable flow pumpskid	
<input checked="" type="checkbox"/>	X Concrete slab for cooling tower/evaporative condenser	
<input checked="" type="checkbox"/>	X Main 3ph electrical supply to chiller including all conduit, power wiring and fused disconnects	
<input checked="" type="checkbox"/>	X 1" water supply line for cooling tower/evaporative condenser/sump tank	
<input checked="" type="checkbox"/>	INCL Structural stand for cooling tower/evaporative condenser	
<input checked="" type="checkbox"/>	X Heat trace materials (Wire, Control, Insulation) and electrical supply for condenser water piping	
<input checked="" type="checkbox"/>	INCL Snow melting pit grid, heat exchanger, pump and glycol (pit by others)	
<input checked="" type="checkbox"/>	ALT Heat reclaim system: desuperheaters, plate and frame heat exchangers, controls	
<input checked="" type="checkbox"/>	X Heat reclaim supporting equipment: Holding tanks, boiler, interconnecting piping and pumps	
<input checked="" type="checkbox"/>	INCL System pressure testing, start up and commissioning	
<b>HVAC &amp; DEHUMIDIFICATION SYSTEMS</b>		
<input checked="" type="checkbox"/>	INCL Desiccant Dehumidifier	
<input checked="" type="checkbox"/>	INCL Unloading/Rigging and placement of Dehumidifier	
<input checked="" type="checkbox"/>	X Roof curbs/Concrete slab for dehumidifier	
<input checked="" type="checkbox"/>	X Duct sock for desiccant type dehumidifier	
<input checked="" type="checkbox"/>	X Duct work for desiccant type dehumidifier	
<input checked="" type="checkbox"/>	INCL Indoor air quality sensor package	
<input checked="" type="checkbox"/>	X Cutting, coring and patching of wall or floor penetrations	
<b>RINK FLOOR SYSTEMS</b>		
<input checked="" type="checkbox"/>	INCL System pressure testing, start up and commissioning	
<input checked="" type="checkbox"/>	X Excavation of spoils from transmission line trench	
<input checked="" type="checkbox"/>	X Backfilling of material and capping of transmission line trench	
<input checked="" type="checkbox"/>	X Supply of limestone shavings or compactable sand for lower grading	
<input checked="" type="checkbox"/>	INCL Frost shield header and tubing	
<input checked="" type="checkbox"/>	INCL Frost shield mechanical: heat exchanger and pump	
<input checked="" type="checkbox"/>	INCL Expanded insulation and vapor barriers	
<input checked="" type="checkbox"/>	INCL Fusion ice rink piping system (HDPE headers and u bends)	
<input checked="" type="checkbox"/>	INCL Floor sensor	
<input checked="" type="checkbox"/>	INCL Rink pipe chairs	
<input checked="" type="checkbox"/>	INCL Wire mesh, rebar, wire ties & expansion joint	
<input checked="" type="checkbox"/>	INCL 5" thick concrete rink slab	
<input checked="" type="checkbox"/>	INCL Place and finish of concrete rink slab	
<input checked="" type="checkbox"/>	INCL Pumping of concrete for rink slab	
<input checked="" type="checkbox"/>	INCL Testing of concrete during pour	
<b>DASHERBOARDS</b>		
<input checked="" type="checkbox"/>	INCL Steel framed hockey dashers	
<input checked="" type="checkbox"/>	ALT 3/8" HDPE poly backer panels	
<input checked="" type="checkbox"/>	INCL Above glass netting - rink ends	
<input checked="" type="checkbox"/>	INCL Above glass netting - rink sides	
<input checked="" type="checkbox"/>	INCL Tempered glass shielding	
<input checked="" type="checkbox"/>	INCL Players boxes	
<input checked="" type="checkbox"/>	INCL Penalty boxes	
<input checked="" type="checkbox"/>	INCL Scorekeepers box	
<input checked="" type="checkbox"/>	INCL Glass shielding around entire players, penalty and scorekeepers boxes	
<input checked="" type="checkbox"/>	INCL Benches in players, penalty and scorekeepers boxes	
<input checked="" type="checkbox"/>	INCL Rubber matting in players, penalty and scorekeepers boxes	
<input checked="" type="checkbox"/>	X Coaches walkway in players boxes	
<input checked="" type="checkbox"/>	INCL Wooden subfloor for players, penalty and scorekeepers boxes	
<input checked="" type="checkbox"/>	INCL Water bottle shelf in players boxes	
<input checked="" type="checkbox"/>	INCL Aluminum 2 piece uprights with gaskets	
<input checked="" type="checkbox"/>	INCL Table in scorekeepers box	
<b>ACCESSORIES</b>		
<input checked="" type="checkbox"/>	INCL White ice paint	
<input checked="" type="checkbox"/>	INCL Line kit for hockey markings	
<input checked="" type="checkbox"/>	INCL Painting and installation of ice markings	
<input checked="" type="checkbox"/>	X Additional ice making over paint/ice markings	
<input checked="" type="checkbox"/>	X Center ice logo	
<input checked="" type="checkbox"/>	X Ice making hoses	
<input checked="" type="checkbox"/>	ALT Ice resurfacer	
<input checked="" type="checkbox"/>	X Hot water system for ice resurfacer	
<input checked="" type="checkbox"/>	ALT Hockey goals	
<input checked="" type="checkbox"/>	INCL Marsh pegs	
<input checked="" type="checkbox"/>	ALT Ice edger	
<input checked="" type="checkbox"/>	ALT Arena rubber flooring	
<input checked="" type="checkbox"/>	ALT Rental skates	