



COST AND REVENUE
PROJECTIONS FOR
RECOMMENDATIONS
INDOOR SPORTS FACILITY
CHEYENNE, WYOMING

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Construction Cost

Fabric Dome Building

240' x 340' Fabric Dome Building	Width	Length	Total SQFT
Turf Building Square Feet	240	340	81600
Interior Bathroom Building	40	80	3200
Entry Building	40	40	1600

Construction Cost	Explanation	SQFT	Per	Total
Entry Building	Construction cost for Commercial building with minimal interior finishes is costing \$250 per square foot. This includes doors, windows, heating and air conditioning, electrical, fire suppression, bathrooms, and office space. Exterior walls left as concrete block with electrical run in conduits. Basic finishes throughout the building. Quote from Noel Griffith Jr. & Associates Architects	1,600	\$250	\$400,000
3 Exits (20'x20')	Included	1,200	\$0	\$0
Ext (30'x30')	Included	900	\$0	\$0
Interior Bathroom Building	Same as entry building, \$250 per square foot with all included as above. Quote from Winter Griffith & Associates Architects	3,200	\$250	\$800,000
Dome Turf Building				
Shell	\$17 per square foot. This includes entrances, lights, heating and air conditioning, fasteners to tie dome to concrete footers, installation costs, and netting for dividing up the turf areas. This is a mid-range quote from several different manufactures. Quote from Yeadon Domes and Arizon Building Systems.	81,600	\$17	\$1,387,200
Erected	Included	81,600	\$0	\$0
Concrete Footers	To be designed by the Dome manufactures. Yeadon Domes quoted national average for the footers they require at \$10 per square foot. The footers are be over engineered to withstand the lifting forces on the building.	81,600	\$10	\$816,000
Insulation, Doors, & Misc	Included	81,600	\$0	\$0

Slab				
Concrete	The underlayment prep is \$5 per square foot. Quoted by S&S Construction.	83,200	\$7	\$582,400
Prep	Concrete floor costing \$7 per square foot. Quoted by S&S Construction.	83,200	\$5	\$416,000
Parking Lot	Asphalt parking lot with concrete curbing is \$6 per square foot. Quoted by S&S Construction.	40,000	\$6	\$240,000
Site Prep	Prep work to level the lot is \$5.50 per square foot. Quoted by S&S Construction	83,200	\$6	\$457,600
Turf	A mid-range turf is \$8 per square foot. Companies recommend the use of different kinds of turfs under the baseball batting cages and the general turf space. More money will be spent on the general area due to use. A thinner turf can be used in the batting cages with the use of overlay batting boxes and pitching mounds. Quoted by Sporturf.	78,400	\$8	\$627,200
Equipment	\$15 per square foot recommended by Yeadon Domes. The team kept the same number from the smaller building since additional rental space was not added. Some netting is included with dome building which could reduce this line item or increase the range of equipment purchased.	36,000	\$15	\$540,000
Land	This was an estimate by the team when looking at local land costs within Cheyenne.			\$400,000
		Sub Total		\$6,666,400
Contingency			10%	\$666,640
		Total		\$7,333,040

Steel Building

240' x 340' Steel Building	Width	Length	Total SQFT
Turf Building Square Feet	240	340	81600
Interior Bathroom Building	40	80	3200
Entry Building	40	40	1600

Construction Cost		SQFT	Per	Total
Entry Building	Construction cost for Commercial building with minimal interior finishes is costing \$250 per square foot. This includes doors, windows, heating and air conditioning, electrical, fire suppression, bathrooms, and office space. Exterior walls left as concrete block with electrical run in conduits. Basic finishes throughout the building. Quote from Noel Griffith Jr. & Associates Architects	1,600	\$250	\$400,000
3 Exits (20'x20')	The steel building can have exits added to the building and to be air lock structures. These structures can be built out of concrete block with minimal mechanical and ventilation in them. The price per square foot is \$200. These entries can be used as service entry and repair staging areas. Quoted by S&S Construction	1,200	\$200	\$240,000
Ext (30'x30')	The steel building can have exits added to the building to be air lock structures. These structures can be built out of concrete block with minimal mechanical and ventilation in them. The price per square foot is \$200. These entries can be used as service entry and repair staging areas. Quoted by S&S Construction	900	\$200	\$180,000
Interior Bathroom Building	Same as entry building, \$250 per square foot with all included as above. Quote from Winter Griffith & Associates Architects	3,200	\$250	\$800,000
Steel Turf Building				
Shell	Steel beams and siding material is \$10.00 per square foot. Quoted by S&S Construction	81,600	\$10	\$816,000
Erected	The company quoted \$5.00 per square foot to erect the building upon delivery. Quoted by S&S Construction	81,600	\$5	\$408,000
Mechanical & Ventilation	All heating and cooling systems for the structure was quoted at \$18.00 per square foot. Quoted by S&S Construction	81,600	\$18	\$1,468,800
Electrical	All electrical including lighting for the fields was quoted at \$18.00 per square foot. Quoted by S&S Construction	81,600	\$18	\$1,468,800

Fire Suppression	This is to install a fire suppression system within the building at \$12.00 per square foot. Quoted by Winter Griffith & Associates Architects	81,600	\$12	\$979,200
Concrete Footers	The footers for the steel structure requires additional engineering and systems installed into the concrete. The steel building manufacture recommends an additional \$10.00 per square foot to be added to cover these additional costs. Quoted by S&S Construction	81,600	\$10	\$816,000
Insulation, Doors, & Misc	Insulation for the building with a fabric protective covering, and doors will cost \$7.00 per square foot. Quoted by Winter Griffith & Associates Architects	81,600	\$7	\$571,200
Slab				
Concrete	The concrete slab was quoted at \$5.00 per square foot for prep work and \$7.00 per square foot for concrete material and labor. Quoted by S&S Construction	81,600	\$7	\$571,200
Prep	The concrete slab was quoted at \$5.00 per square foot for prep work and \$7.00 per square foot for concrete material and labor. Quoted by S&S Construction	9,067	\$5	\$45,333
Parking Lot	Asphalt parking lot with concrete curbing is \$6.00 per square foot. Quoted by S&S Construction.	40,000	\$6	\$240,000
Site Prep	Prep work to level the lot is \$5.50 per square foot. Quoted by S&S Construction.	83,200	\$6	\$457,600
Turf	A mid-range turf is \$8 per square foot. Companies recommend the use of different kinds of turfs under the baseball batting cages and the general turf space. More money will be spent on the general area due to use. A thinner turf can be used in the batting cages with the use of overlay batting boxes and pitching mounds. Quoted by Sporturf	78,400	\$8	\$627,200
Equipment	A budget line of \$15 per square foot was recommended by Yeadon Domes. Some netting is included with dome building which could reduce this line item or increase the range of equipment purchased.	36,000	\$15	\$540,000
Land	This was an estimate by the team when looking at local land costs within Cheyenne.			\$400,000
		Sub Total		\$11,029,333
Contingency			10%	\$1,102,933
		Total		\$12,132,267

Operating Costs for Both Buildings

Operating Cost		Annually	Monthly	Daily
Power	Power cost was calculated by comparing similar buildings that are owned by the State of Wyoming within the Cheyenne Area. Three different warehouses were used to generate the average square foot costs for these buildings. The team used the same price for both dome and steel in the final calculations. The Yeadon and Arizon companies claim that the dome buildings are less expensive to operate by upwards of 20% cheaper. The annual cost for gas and electricity was \$70,136.31 or monthly of \$5,844.69. Estimation by the team.	\$70,136	\$5,845	\$192
Labor	This line item is for hourly labor for the facility. This number is an estimation of labor to be used in a week by the management team. A \$10.00 per hour rate was used for an hourly employee and having about 25 hours to use per day. The facility was calculated to operate for 360 days per year and the number was rounded up to \$90,000.00 per year or \$7,500.00 per month. Estimation by the team.	\$90,000	\$7,500	\$247
Management	This line item is for 2 managers to operate the facility. The general managers salary was calculated at \$80,000 and the assistant manager at \$60,000, both including their benefits, this is a total annual expense per person. The annual expense for these managers was estimated to be \$140,000.00 or monthly of \$11,666.67. Estimated by the team.	\$140,000	\$11,667	\$384
Turf	The turf has a life expectancy of 10 years. The turf was broken down into 2 different kinds of material for the facility. The field space would use a more expensive turf than the batting cages. The replacement cost at the 10 year mark with an inflation rate added would cost \$627,200.00 or a budgeted annually at \$62,720 and a monthly line item of \$523 to save for when it is time to replace the turf. Quoted by Sporturf.	\$62,720	\$5,223	\$172

Insurance	Insurance was estimated by Burns Insurance with very little knowledge of actual costs. The agents felt that this would be a conservative estimate if insurance waivers were required by the participants. An annual cost of \$15,000.00 and a monthly expense of \$1,250.00.	\$15,000	\$1,250	\$41
Equipment	Equipment was estimated to be replaced or added to at an annual cost of \$36,000.00 or a monthly cost of \$3,000.00. Estimated by the team.	\$36,000	\$3,000	\$99
Misc	The miscellaneous line item is to cover advertising, coaching expenses, or other unforeseen expenses that will arise for normal business operations. The team estimated \$40,000 per year or monthly of \$3,333. Estimated by the team.	\$40,000	\$3,333	\$110
Total		\$453,856	\$33,117	\$1,243

Revenues

		Peak	Peak	Off Peak	Off Peak
Batting/Pitching Cages	<p>\$40 Per Hour for Peak and Off Peak hours</p> <ul style="list-style-type: none"> \$4,480 Per Peak Months (Monday through Sunday the batting cages will be used a total of 16 hour per day) \$4,160 per Off Peak Months (Monday through Friday the batting cages will be used a total of 16 hours per day, and on Saturday and Sunday used a total of 12 hours per day) 	\$40	\$4,480	\$40	\$4,160
1/4 Turf Rental	<p>\$100 Per Hour for Peak Hours, \$80 Per Hour for Off Peak Hours</p> <ul style="list-style-type: none"> \$7,000 Per Peak Month (Monday through Friday a quarter of the field will be used for 10 hours per day, and on Saturday and Sunday for 10 hours per day) \$4,420 Per Off Peak Month (Monday through Friday a quarter of the field will be used for 10 hours per day, and on Saturday and Sunday for 4 hours per day. Parties are estimated to take up the quarter field time on the weekends.) 	\$100	\$7,000	\$80	\$4,240
1/2 Turf Rental	<p>\$140 Per Hour for Peak Hours, \$120 Per Hour for Off Peak Hours</p> <ul style="list-style-type: none"> \$3,640 Per Peak Month (Monday through Friday half of the field will be used for 2 hours per day, and on Saturday and Sunday for 3 hours per day) \$2,160 Per Off Peak Month (Monday through Friday half of the field will be used for 2 hours per day, and on Saturday and Sunday for 4 hours per day) 	\$140	\$2,240	\$120	\$2,160

Full Turf Rental	<p>\$300 Per Hour for Peak Hours, \$275 Per Hour for Off Peak Hours</p> <ul style="list-style-type: none"> \$2,700 Per Peak Month (Monday through Friday all the field will be used for 1 hour per day, and on Saturday and Sunday for 2 hours per day) \$3,025 Per Off Peak Month (Monday through Friday all the field will be used for 1 hour per day, and on Saturday and Sunday for 3 hours per day) 	\$300	\$2,700	\$275	\$3,025
Party Rental	<p>\$150 Per Hour for Peak Hours, \$150 Per Hour for Off Peak Hours, 2 room available (Party rooms are calculated as getting 1 hour of quarter turf time along with 1 hour of party room space rental)</p> <ul style="list-style-type: none"> \$3,900 Per Peak Month (Monday through Friday the party rooms will be used for 2 hours per day, and on Saturday and Sunday for 8 hours per day) \$3,900 Per Off Peak Month (Monday through Friday the party rooms will be used for 1 hour per day, and on Saturday and Sunday for 8 hours per day) 	\$150	\$3,900	\$150	\$3,900
Weekly Sales		Peak	\$20,320	Off Peak	\$17,485
Monthly Sales		Peak	\$81,280	Off Peak	\$69,940
Annual Sales	9 Months of Peak + 3 Months of Off Peak =	Peak	\$731,520	Off Peak	\$209,820
Total Revenue	Peak + Off Peak	\$941,340			

Calculated Internal Rates of Return of all Alternatives

Internal Rate of Return		20 Years	40 Years
	Building A Dome	11.99%	14.57%
	Building B Dome	9.75%	11.01%
	Building C Dome	6.53%	10.07%
	Building A Steel	7.19%	11.11%
	Building B Steel	4.77%	8.12%
	Building C Steel	1.02%	6.48%