

Membrane Competition Spread Sheet

Competitors	History	Arena and/or Indoor Pool Experience. References Yes or No	size range offering	aluminum or steel or both	Insulation: yes or no	If yes, what Insulation type	Membrane type offered	Current delivery time from order	Turn key: yes or no	Guarantee period membrane	Guarantee period substructure	Max Wind load	Environmental Program	Independent Engineer Review	Applications	Doors windows skylights	Permits	Sells Direct or through Partner	Verified Independent Engineer Document	Other comments: Strengths / Weaknesses
Sprung Instant Structures www.sprung.com and sprungarenas.com	125 year old company. 100% Canadian. Invented the membrane pre engineered structure 40+ years ago. Holds technology patent	Numerous NHL sized arenas and many indoor pools Great references and video testimonial	30' to 220' standard. Can build larger as a customized solution. Any length	Aluminum with interior channels for membrane. No welding points.	YES. All structures are manufactured for installation either at purchase or down the road	Johns Manville LEED certifiable. R30. Has a special design for pools to ensure no mold or mildew	Seamans manufactured special membrane. Seamans confirmed strongest membrane they make and will only sell it to Sprung!	2 to 4 weeks	yes with their strategic alliance partner, in Ontario - BLT Construction	20 years. Should last 30+. Can redo the membrane with no disruption to the building. Great Blue Heron Casino in Port Perry, ON great reference	30 years. Many buildings in Ontario are 40+ years old and look new	Each structure is engineered to the exact location. Great hurricane references and independent research	YES. LEED Silver Sprungs are in the USA	YES by an independent engineer in Ontario	Every industry and application imaginable. Basically anything 3 stories or less. Offices, dining facilities, churches, casinos, healthcare, prisons, gymnasiums and so on	All types of commercial window. Translucent daylight offered at no extra cost	Will arrange with their alliance partner BLT Construction. BMEC approved to make permitting a snap in Ontario	Both	Sprung has a many independent engineering documents to verify and backup their statements	Best of class for sure. Only company to put the membrane between and inside their beams. This gives them the tightness and the energy efficiency. Patented technology. Only one with encapsulated insulation for pools. Two Sprungs survived Hurricane Katrina while all the conventional structures beside them were destroyed
Big Top bigtopshelters.com	Founded in 1979.	No experience in either	20' to 166' width and any length	Galvanized steel with welding spots that will corrode over time	No	Can do insulation after with a partner. Very limited and low R Value	3 options Large structures 28oz translucent narrow structures 18oz-22oz weight load 35-40 lbs per square foot	4 weeks Small structures 6 weeks and large structures 10-12 weeks	Yes. Option Offers on site construction manager interiors done locally	2 years to 10 years	15 years on structure will match competitors if needed	100 MPH	GSA Approved but no LEED existing structures	Yes	Primarily military applications, Warehousing, Construction shelters, Vehicle Inspection shelters, Sports and Recreation Exhibits, RV & Boat Storage, Environmental Enclosures	Offers windows and doors does not recommend skylights with 28oz translucent fabric	Permits to be issued locally	Direct	None	Is a cheap alternative but has had many structural failures and collapses. Limited structures in Canada. No daylight panel
Calhoun Super Structures www.calhoun.ca	Founded for agricultural structures	Have one small ice surface cover in Northern Quebec. Non insulated and already showing rust spots	Up to 140' wide and any length	Hot tipped galvanized steel with welding spots which will rust and corrode	Partial with their insulated liner. Very low R value, less than R7?	Only inner insulated liner	12 1/2 oz Polyethylene woven fabric	12-14 weeks	Mentioned the distributor would look after project not very confident	15 year Warranty prorated	10 warranty prorated	Told me built to local code	No	offered independent engineering firm to document	Equipment, Manufacture ring, Warehousing, dairy, Horse barns, Farming, Hay and Salt Storage	Offers Doors and windows no skylights	said local distributor would help with permits not very confident	Sells through distributors	Yes	Another low end, low cost structure perfect for small barns. Have had structural damage and membrane destroyed by wind storms
Yeadon Air Supported Structures www.yeadondomes.com	25 years experience	A few arenas but expensive to maintain. Very limited references and a lot of disgruntled customers	can custom built to fit the application	Air supported with no structural element. Must operate a special mechanical system to keep the building inflated	Can insulate up to an R14, but no independent energy study	Their own product called Yeadon R plus, 3" fiberglass	Seamans inexpensive and low quality		Will install work with partners to turnkey	10 - 15 years prorated	Mechanical system for 1 year. Materials and workmanship for 3 years	Have a dome sensor and snow sensor control. Has to be constantly monitored for wind and snow	No	None	Many sports and rec. industrial, and various other industries.	No Skylight or windows. Various options for doors	Client arranges	Direct	None	Many collapsed throughout North America. Not a long term solution, more of a band-aid structure. Great for tennis bubbles that go up in the winter and down in the summer
Megadome www.megadomebuildings.com	Founded 1975 in the Montréal Quebec area	None. Not designed for that.	up to 125' wide and 900' long	Pre Galvanized Steel and Hot Tipped Galvanized for corrosive environments	No insulation as such offers inner liner. Resellers will add their own type of insulation which is unproven and no R value proof	N/A	12 1/2 oz fire rated interwoven liner. Also offers PVC liner but does not recommend	4 weeks can be longer as the fall is busiest time of year	Yes with crew on board after delivery	10 warranty prorated	2 years on the steel, has a 2 year guarantee on parts and labour	could not provide as he would have to check with local municipality	No	No but client can do that	Industrial, Commercial, Equestrian, Agriculture, Bulk Storage, Waste Management, Mega Projects	Offers windows and doors does not provide skylights says fabric emits 30% light	Does not help with permits will answer questions on drawings	Central Ontario has a factory rep	No	Primarily for agricultural applications and cold storage. Have had wind damage. Membrane and steel have been destroyed by storms.
			300' wide and any length in modules	Uses steel	Yes	Offers rigid board or batten fiberglass	could not provide	6-15 weeks	Can offer turnkey very expensive uses recognized through erectors across 50 states	could not provide	could not provide	could not provide only that they have a maximum weight load of 250 lbs per square foot and an average installation is 40 to 50 lbs per square foot	US Green Building Council and Leadership in Energy & Environment Design www.usgbc.org/LEED Cool Roof Energy Council	can offer pure review by independent engineer if required	All structures across the US and Worldwide	Doors & windows installed by local builder does not recommend skylights but light panels	No questions answered by local builders in each state	sells through recognized distributors	If required	These are metal walled structures with clear span roofs spoke with and engineer who could not provide to many answers and told me not a very organized person. Claims to have the most comprehensive R&D facility in the industry has marketing material Building Profit Canada on website. Very bad service and very disorganized.
Norseman (CMG Building Sales) norseman.ca	Purchased the assets from CoverAll in 2010. Company was founded in 1921	Ted Reeves Arena in Toronto. Terrible references and want to tear it down. Filled with mold and mildew	140' wide and any length	triple coated galvanized steel in modular pieces	Yes	uses straight liner and add R20 as additional insulation more elaborate structures can add R30	Have an insulation and interior liner up to an R20. No positive references	6-8 weeks	Yes through distributor CMG Building Sales in Ontario	15 years prorated	15 years prorated	can use 6" tubing in max wind areas and snow load	CNA/CSA-A660 certified working towards ISO certification	Independent engineers in Ontario approved documentation	In many industries. Applications are hay storage, cold storage, some sports and rec and vehicle storage	Offers window and doors and does not recommend skylights have created many leakage issues and difficult to maintain	Yes will help with entire process	CMG Sales is a distributor for Ontario	Will provide independent engineer and documentation	Very hard to get a positive reference as so many Coveralls have collapsed in Ontario. Guelph University had to condemn their sports dome.
Rubb rubb.com	Founded in Norway in 1968, sell out of their USA office	None. Not designed for that.	10' - 130'	Steel Hot dipped galvanized steel	Yes but sold through their resellers. Not part of the manufacturing process	R19 but no independent proof of that	28 oz/square yard PVDF coated PVC	8-12 weeks from order all custom orders they do not stock not sure how long	Yes has there own crew will provide project manager if asked	10 Years membrane lifespan, 1 year guarantee	1 year guarantee	90 MPH	ISO approved	only has internal engineers, .	Military, sports complexes, aviation, marine, bulk, industrial and many more applications	offers windows, doors but no skylights	Does not help with permits	Sells Direct and through partners	Internal Engineers has drawings approved state by state	Poor engineering. Primarily sold as military applications. General Motors tried them and have since blackballed them as a supplier. Will say anything to sell a structure, but cant back up their claims with independent proof.
Bright Span Structures www.brightspanbuildings.com	2010 from the bankruptcy of Coverall. Owner was the Ontario CoverAll reseller	None	20ft wide to 160 wide	Galvanized Steel	No mention of insulation	N/A	12 oz fabric		Installed and sold by local dealers	10 year for commercial use and 16 year for farm applications (pro rata guarantee)	None	designed to national building code requirements	None	will supply stamped drawings for certain applications	Mostly farming and warehousing applications but can be used for wide variety of applications	variety of door options available. No skylight	Reseller can assist	sells thru local dealers	None	Just started out of the CoverAll bankruptcy. Same type of structure as Coverall. Not designed for people use.