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| ***Building comparisons*** | – PVC membrane seasonal building | Universal architectural membrane permanent bldg. | Pre-engineer Steel building | Brick – block – concrete panel type building | Monolithic Concrete Dome building |
| Building removable for summer use to make pool outdoors | **YES** | **NO** | **NO** | **NO** | **NO** |
| Building insulation estimate in R-factor | **5** | **10** | **20** | **25** | **60+** |
| Building life span under normal conditions – in years | **12** | **15** | **30** | **40+** | **100+** |
| Cost to insure for replacement | **MedHigh** | **MedHigh** | **Med** | **Med** | **VeryLow** |
| Wind resistance – Storm – Tornado - Hurricane | **70 MPH** | **70MPH** | **90MPH** | **90MPH** | **150MPH+** |
| Earthquake resistant | **Moderate** | **Moderate** | **Low** | **Low** | **High++** |
| Snow load on roof – tolerances for weight | **Low** | **Low** | **Med** | **MedHigh** | **High++** |
| Ultra Violet deterioration resistant | **Low** | **Low** | **Med** | **MedHigh** | **High++** |
| Cost to operate expressed in $ per square ft. per year. – Utilities rural | **$16** | **$14** | **$12** | **$10** | **$3** |
| Cost to repair (upkeep) expressed in cents per square ft. per year | **$.10** | **$.20** | **$.50** | **$.40** | **$.10** |
| Time to construct building | **10 days** | **4 weeks** | **3-6 mth** | **6-8 + mth** | **2 mths** |
| Is the building leasable | **YES** | **YES** | **NO** | **NO** | **NO** |
| Esthetics – scaled on 1-10 (a10 being highest) - (very subjective) | **3** | **4** | **6+** | **9** | **10** |
| Cost to build expressed in $ per square ft. – Rural estimate | **$15** | **$35** | **$145+** | **$250++** | **$125** |
| HVAC original equipment cost | **MedHigh** | **MedHigh** | **Med** | **Med** | **Low** |
| Design cost – fees and services | **Low** | **Low** | **Med** | **High** | **Med** |
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Some of the things that have to be considered are:

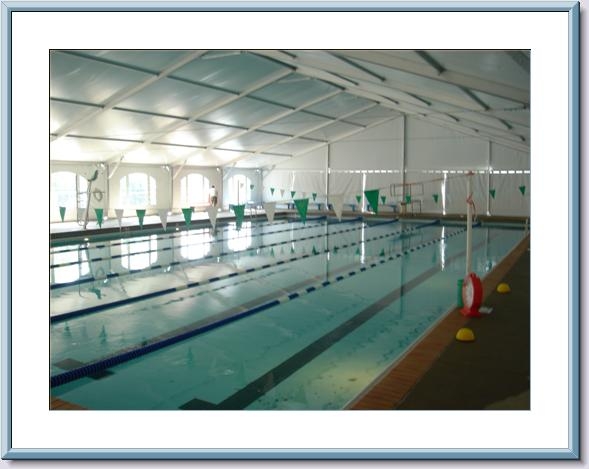
* What is the capital investment limits for the project?
* What are the demographics the facility will serve?
* What are the geographic particulars for your area?
* Is this a phased project or will it be “what you see is what you get”?
* Do you need some pools indoors and some pools outdoors?
* What are your design team’s limitations?
* What are your local code restrictions?

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of building** | | 32,000 sq.ft |  | **Building** | **Annual Operational** | |  |
|  |  |  |  | **Cost** | **Cost - 4 seasons climate** | | |
| PVC Membrane seasonal building | | |  |  |  |  |  |
| convertible to outdoors in summer | | | | $640,000 | $608,000 |  |  |
|  |  |  |  |  |  |  |  |
| Arch.Membrane permanent building | | | | $1,120,000 | $512,000 |  |  |
|  |  |  |  |  |  |  |  |
| Pre-engineered steel building | | |  | $4,640,000 | $384,000 |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Monolithic Concrete Dome building | | | | $3,900,000 | $224,000 |  |  |
|  |  |  |  |  |  |  |  |

For example:

If you decide on a steel building for the natatorium, the basic operational cost over the first 20 years may be $7.7 million total with a $3.7 million cost to maintain and upgrade over that period of 20 years. Compare that to a Monolithic Concrete Dome structure which – over the same period of time – should have a basic operational cost of $4.4 million with a $2.2 million cost to maintain and upgrade. Compare $11.4 million to $6.6 million and you be the judge. Can you afford to build it and operate it?

SERG temporary structure >

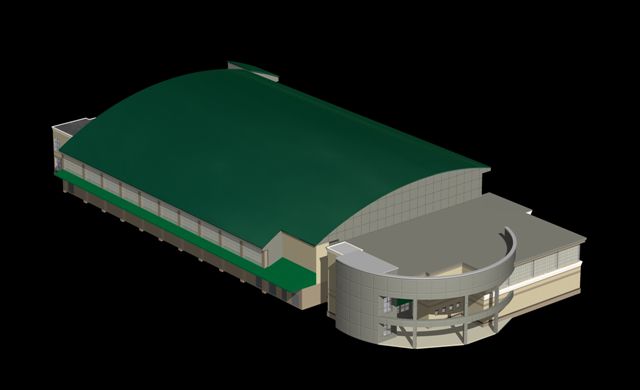


Universal arch. membrane structure >



Pre-engineered steel structures >





Brick – concrete – structure >



Monolithic Concrete Dome structure >



