



General Building Data:

Building Name: Towson Center Arena Addition

Location & Site: Towson, Maryland

Building Occupant Name: Towson University

Occupancy: Basketball Arena

Size: 116,586 square feet

Number of stories: 3

Primary Project Team:

Owner: Towson University

<http://www.towson.edu/>

General Contractor: Gilbane Construction

<http://www.gilbaneco.com/>

Architect: Hord Coplan Macht

<http://www.hcm2.com/>

Associated Architects: Sasaki

<http://www.sasaki.com/>

Civil: Site Resources, Inc.

www.siteresourcesinc.com/

Structural: Faisant Associates, Inc.	http://mysite.verizon.net/faisant/
MEP: James Posey Associates, Inc.	http://www.jamesposey.com/
Landscape: Mahan Rykiel Associates	http://www.mahanrykiel.com/
Code Consultants: Koffel Associates	http://www.koffel.com/
Lighting: Bruce Dunlop Lighting Design LLC	http://www.dunloplighting.com/
IT Consultants: Unlimited Systems Support, Inc.	http://www.ussinet.com/
Foodservice Consultants: Culinary Advisors	http://www.culinaryadvisors.com/

Dates of Construction: May 2011 – March 1, 2013

Cost: 33.5 million (overall project)

Project Delivery Method: Design – Bid – Build

Architecture:

Towson University will build a new state of the art arena for basketball, gymnastics and volleyball. Tiger arena will seat over 5,000 people and also accommodates for luxury suites. A zinc, steel and glass façade gives a modern feel to the main entrance of the arena. Vertical windows help stretch the building as to make it seem taller and more profound. A large overhang covers a glass and steel façade and helps to anchor the building. Floating over the entrance the overhang gives a sense of strength to the building and exaggerates the grand scale.

Major National Model Codes:

NSPC 2006 – National Standard Plumbing Code/2007 Supplement

IBC 2009 – International Building Code with modifications

NFPA 101 – National Fire Protection Association

Zoning:

Floor 1 and 2 – A-4 Use, Floor 3/Mezzanine – A-3 Use and there are also B & S Uses. High rise provisions are not applicable because the highest floor is less than 75 feet above the lowest level of fire department access. The building will have a maximum building area of 60,448 square feet. The building will be sprinkled. Based on the A-3/A-4 Use Groups of 1B

Construction the allowable area is unlimited, the allowable height is 160 feet and the allowable stories is eleven. To see more Baltimore County Zoning regulations please visit:

[Baltimore County Citizen's Guide to Zoning](#)

Historical Requirements: Not Applicable

Building Enclosure:

Building façades:

Finish Carpentry backing material consists of medium-density fiberboard that complies with LEED for regional materials, VOC content, forest certification and contains no urea formaldehyde. ADA compliant all-glass entrance doors have 6 inch metal finishes and all-glass sidelights. Glazed exterior aluminum curtain walls are installed as stick assemblies. The designed basic wind speed is 90 mph for the curtain walls, and they will be tested according to ASTM E 330. Curtain Wall Type 1 and 2 are 7 ½" deep. These two wall types consist of conventionally glazed exterior aluminum curtain walls installed as stick assemblies. The U-factor will be no more than .43 Btu/sq. ft. x h x deg F per NFRC 100. Glazing will consist of 3/4 inch tempered glass that is in accordance with ASTM C1048. Sealants for glazing comply with LEED for VOC content. Low-E coatings will be used for insulating-glass units. Fire-protection-rated glazing is labeled for a temperature rise rating of 450 deg F, a hose-stream test and the fire resistance rating in minutes. The minimum glass thickness for exterior lites is not less than 6.0 mm.

Roofing:

Coordination will be done with sheet metal flashing, trim layout, penetrations to be flashed and seams of adjacent materials. Materials comply with LEED for percentages by weight of recycled material. Copings and roof edge flashings are tested according to SPRI ES-1, and the design pressure will be indicated on the drawings. Aluminum sheet are ASTM B 209 alloy, and the finish is white or silver. Where field painting is indicated, there is a minimum dry film thickness of 0.2 mil. Roofing is a SBS-modified bituminous membrane. There is also be a vapor retarder and roof insulation. Roof insulation is 4" minimum thickness polyisocyanurate with a compressive strength of 25 psi. Roofing materials comply with LEED for solar reflectance and VOC content. The roof of the arena is flat as seen from the images. Styrene-butadiene-styrene-modified asphalt-sheet materials make up the roofing membrane sheet. There is also a

smooth-surfaced roofing membrane cap sheet and a granule-surface roofing membrane cap sheet. Base flashing sheet materials include a granule-surfaced flashing sheet and glass-fiber fabric.



Sustainability Features:

Glass-fiber board is low-emitting according to ASTM D 5116 and will emit less than 0.05-ppm formaldehyde. The project fulfills Sustainable Sites Credit 8 for light pollution reduction. LEED credit 1.1 for water efficient landscaping is achieved. LEED credit 2.2 was achieved to divert 75% of construction waste from disposal. LEED credit 5.2 was achieved for having 20% of materials being extracted, processed and manufactured regionally.

Photo to be Added: