Green Globes® is a green building guidance and assessment system that offers an effective, practical and affordable way to advance the overall environmental performance and sustainability of new or existing commercial buildings.

Program Elements are:
. Software tools that speed and simplify online building assessment in environmental categories
. “Best practice” guidance for green construction and operations
. Rating/certification system that requires on site visits to achieve one – four Green Globes

ASU’s Walter Cronkite School of Journalism used Green Globes New Construction (GGNC) to capitalize upon sustainable design of the building during the construction process.

Percentage of 1000 points achieved by Arizona State University Walter Cronkite School of Journalism

Green Globes Report

Arizona State University
Walter Cronkite School of Journalism

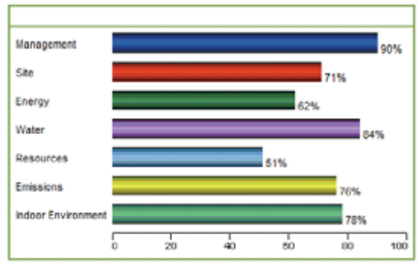
INTRODUCTION

ASU Walter Cronkite School of Journalism, Phoenix, Arizona is a 7 story, 235,700 ft² building. The estimated construction cost is $283/sq.ft.

ASU Walter Cronkite School of Journalism is described as follows:

A seven (7) story structure consisting of university classrooms, activity areas and faculty offices on the 1st, 2nd, 3rd & 4th floor. PBS occupies the 5th floor with offices and control rooms and the 6th floor is shared between ASU & PBS with control rooms and broadcast studios. The 7th floor consists of mechanical equipment, electrical and elevator equipment.

The client is ASU/ COP/ KAET. The architect is HDR. The mechanical engineer is HDR, the electrical engineer is HDR and the structural engineer is CTS.



To find out how the performance of ASU Walter Cronkite School of Journalism compares to other buildings that have been assessed, and to obtain certification, the data must be verified by a licensed engineer or architect who has undergone the Green Globes training and certification.

ASU WALTER CRONKITE SCHOOL OF JOURNALISM ACHIEVED AN OFFICIAL SCORE OF 69%
RATING: TWO GREEN GLOBES

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GREEN BUILDING INITIATIVE™

GREEN GLOBES

CASE STUDY

Green Globes®
New Construction

Arizona State University

Walter Cronkite School of Journalism

PROJECT:	ASU Walter Cronkite School of Journalism
LOCATION:	Phoenix, Arizona
FLOOR SPACE:	235,700 square feet
OWNER:	City of Phoenix and Arizona State University
TENANT:	Arizona State University and KAET Public Radio
PRIMARY PROJECT MANAGER:	HDR Architects and Engineers
CONSTRUCTION CONTRACTOR:	Sundt Construction
SUSTAINABILITY CONSULTANT:	Justin Gilies, Sundt Construction

RATINGS: TWO GREEN GLOBES

Project Highlights

The Walter Cronkite School of Journalism is a 235,700 square-foot academic facility located in downtown Phoenix. The school is located near a light rail station that connects its downtown university campus to the main campus in Tempe, Arizona. The ground floor contains retail space while the upper floors house classrooms and offices. A working TV station and a daily newspaper are also located in the building. The sixth floor consists of a newsroom, production space and control rooms.

When the Cronkite School received independent status in 2004, plans were made to build a new campus in an industrial area of downtown Phoenix. Construction on the new facility began in early 2007 and was completed by mid 2008. The tenants moved into the state-of-the-art facility in August of 2008 and officially dedicated the new building on the Cronkite School's 25-year anniversary in November of 2008.

The project team wanted to rate and certify the sustainable attributes of the building, and chose to use Green Globes® for New Construction because of its nationally -recognized, user-friendly approach to environmental assessment. Campuses built or remodeled with Green Globes can save money on utility bills and improve indoor air quality - not to mention lessen the building's environmental footprint.

Design Concept

The Walter Cronkite School of Journalism was designed to symbolize the role of journalism in today's society. The exterior uses materials of glass and masonry. The upper multi-colored metal panels are intended to signify radio spectrums. Sunscreens on the façade of the building help reduce heat loads and a prefabricated lightweight steel structure designed for the top of the building allows for long spans and high ceilings needed in TV studios. The school is a public building with an immense interior atrium and its interior walls are emblazoned with the iconic words of the First Amendment. This $55 million building is proof that a landmark project can greatly improve and beatify a run down city area, blend in with the existing landscape and at the same time be environmentally-friendly.

Other Environmental Features

- High albedo roof surface
- Integration of daylighting
- Proximity of public transportation
- Preferred carpooling parking
- Building materials with recycled content
- Incorporation of durability, adaptability and disassembly in materials and structural systems
- Construction waste management plan
- Building space designed for recycling and waste management
- Ozone depleting refrigerants avoided
- Properly designed storage area designed for hazardous chemicals
- Domestic hot water system designed to avoid Legionella
- Solar shading for occupants to control brightness
- Conforms to ASHRAE 55 – 2004 for thermal comfort

Other HE campuses using Green Globes are Drexel University and The University of Arkansas. For press releases and other education case studies, please visit this page (http://www.thegbi.org/commercial/about-green-globes/education-buildings.asp) on the GBI website.

Scoring 1,000 Possible Green Globes Points

Project Management ASU Walter Cronkite School of Journalism achieved a score of 90% in the **Project Management** section of Green Globes. Highlights include: a robust integrated design process that was used throughout the whole project, an early commitment to environmental purchasing, and a thorough commissioning plan.

A team approach was used throughout the various stages of the design and construction process, as the architects, engineers, consultants, prime contractor, owner and other stakeholders worked collaboratively to ensure the environmental goals of the project were agreed upon and ultimately implemented.

Site The building was awarded a score of 71% in the **Site** section. The school is constructed on an existing serviced and brownfield site that was remediated as part of the project. The development density exceeds 14,000 m²/ha (60,000 ft²/acre) on land that is neither a wetland nor a wildlife corridor. The design accommodates the building's functions while minimizing disturbance to the site's topography, soils and vegetation. The project incorporated a naturalized landscape using native trees, shrubs and ground cover with minimal lawn.

Energy The building was awarded a score of 62% in the **Energy** section, and achieved a design energy performance that is projected to be 16% more energy efficient than a building with similar attributes, according to the Energy Star program, with an estimated annual energy use of 28,945,568 kBtu (122.807 kBtu per gross square foot per year). Additionally, carbon dioxide (CO_2) emissions savings compared to a benchmark building are estimated to be 273,000 kg.

The design of the building envelope contributed significantly to the superior energy performance estimates. The thermal resistance of the exterior enclosure meets Building Energy Code levels and the thermal resistance (R) of the exterior wall is 13 while the roof is 30. Window glazing, with a low U value of .65, and window treatments that enhance interior thermal comfort were also incorporated.

There are measures to prevent groundwater and/or rain penetration into the building, and the integrity of the building envelope was optimized using best air/vapor barrier practices.

Energy efficient equipment is utilized throughout the building, including energy-efficient lighting fixtures, lamps and ballasts, lighting controls, energy-efficient HVAC equipment, high efficiency (modulating or condensing) boilers, energy-efficient hot water service systems, building automation systems, variable speed drives, and energy-efficient motors.

Water The building achieved a score of 84% in the **Water** section and is designed to achieve the most stringent water consumption target of less than 720 gallons/student/year.

Total water consumption is metered, and sub-meters are provided for high water-usage areas. The design includes the following of water-efficient equipment: water-saving devices or proximity detectors on urinals, low flush toilets (less than 6 L), water-saving fixtures on faucets (4 L /min) and showerheads (9.0 L/min.), and other water-saving appliances. A water-efficient irrigation system was used in combination with the landscaping. Plants were chosen that are able to withstand extreme local weather conditions, and that require minimal irrigation. Irrigation will use non-potable water, though it can be supplemented with potable water as needed.

Indoor Environment The building achieved a score of 78% in the **Indoor Environment** section. The Walter Cronkite School of Journalism academic building has incorporated a wide range of design features to provide a healthy, productive and pleasant environment to support academic learning.

Features Include Fresh air intakes located more than 60 ft from major sources of pollution, protected vent openings, systems and components that avoid the release of pollution and fibers into the ventilation air path, and sufficient ventilation, 0.24 cfm/ft2 , will be provided to obtain acceptable IAQ, in accordance with ANSI/ ASHRAE 62.1-2004 using the Indoor Air Quality Design Procedure.

The mechanical systems will provide effective air exchange (i.e. Implementation of space demand control ventilation – Area CO_2 levels are monitored and ventilation rates are adjusted accordingly). Indoor air quality monitoring, and the capability of flushing-out the building with 100% outside air are provided to optimize indoor air quality. Enclosed parking areas will be mechanically ventilated.

Additionally, there is easy access to the air-handling units (AHUs) to facilitate their maintenance and drainage, which will avoid the accumulation of debris and measures are in place to avoid air pollution at-source (i.e. –Jani or closets and large volume copy rooms are directly exhausted outside). Interior materials are low-VOC emitting, non-toxic, and chemically inert (i.e. Carpet adhesives, all interior caulking and sealants, all paint low-VOC, cabinet adhesives).

Acoustical comfort design was emphasized and spaces within the building are zoned so as to provide optimum protection from undesirable outside noise. The sound level transmission through the building envelope is minimized, and there are acoustic controls to meet the privacy requirements (i.e. Full height acoustically insulated walls, acoustical transfer boots for air transfer, low velocity duct distribution to acoustically sensitive areas, all aluminum frame doors have acoustical seals around them). Speech intelligibility requirements are met for the various spaces and activities, such as face-to-face communication. There are measures to mitigate acoustic problems associated with mechanical equipment noise and vibration, and plumbing systems.