**SUSTAINABILITY INITIATIVES AND GREEN DESIGN GUIDELINES**

**UNIVERSITY OF MASSACHUSETTS LOWELL**

The University of Massachusetts Lowell is committed to improving the environmental performance of its facilities. Consideration for green building is a priority and should be a driving factor when selecting building products, means and methods. The following guidelines should be considered for each project undertaken and incorporated into the design and specifications of a project to the extent that it can be without impacting the overall project goals.

• Water use reduction: Incorporate plumbing fixtures that are high efficiency or dual flush. Toilets, urinals and faucets should target 20‐40% less water usage than the listed baselines: Toilets 1.6 gpf, Urinals 1.0 gpf, Faucets 0.5 gpm or 0.25 gallons per cycle for metering faucets

• 3rd party commissioning of HVAC systems, lighting controls, and hot water systems

• Use ENERGYSTAR rated equipment

• Eliminate or reduce use of CFC‐based refrigerants. When reusing existing equipment, retrofit to use non‐CFC refrigerants

• Use daylight lighting controls where possible and occupancy sensors at other areas.

• HVAC zoning and controls –create separate control zones for areas with solar exposure and interior spaces. Use active controls, such as CO2 and occupancy sensors, for special spaces such as conference rooms and private offices that can sense space use and respond accordingly

• Efficient HVAC equipment – utilizing the latest technology and equipment using ASHRAE standards and guidelines as the basis of design. Incorporate DDC technology, with Bacnet capabilities to integrate with the Building Management System.

• Renovation projects should try to reuse as much of the existing space and finishes as possible.

Salvage and refurbish materials when possible.

• Construction waste management – contractor to recycle construction waste in order to divert disposal to landfills. Materials such as clean wood, drywall, carpet, insulation, etc can be recycled.

• Use materials with recycled content – either postconsumer or pre‐consumer recycled content

• Use materials that are manufactured “locally”, within 500 miles.

• If possible, use certified wood and rapidly renewable materials.

• Contractor/vendor should identify, when practical, products that minimize manufacturer’s packaging and shipping waste. Packaging and shipping waste shall be sent back to the manufacturer for recycling or sent to a recycling facility for appropriate reclamation.

• Indoor air quality – design ventilation system to supply outdoor air at the rate required by

ASHRAE Standard 62.1‐2007

• Install filters on return grills during construction with a minimum of MERV 8.

• Upon completion of construction, replace HVAC filters.

• Use Low VOC materials for adhesives and sealants (within limits of South Coast Air Quality Management District Rule #1168); paints and coatings have VOC emissions not exceeding Green Seal GS‐11 requirements.

• Use Low emitting materials when selecting flooring systems, furniture systems and seating

• Use products with no added urea‐formaldehyde resins

• Design space to provide occupants with views of daylight

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