

BUILDING GREEN IS SMART BUILDING



Modular Genius cares about our environment and our customer’s budget. The building materials we selected focus on energy savings and environmental concerns that favor GREEN building. Green building is the practice of increasing the efficiency with which buildings use resources - energy, water and materials - while reducing building impacts on human health and the environment, through better site placement, design, construction, operation, maintenance, and removal - the complete building life cycle. Modular Genius is a proud member of the U.S. Green Build Council. The United States Green Building Council (USGBC) is a 501(c) 3 non-profit community of leaders working to make green building accessible to everyone within a generation. USGBC has developed The Leadership in Energy and Environmental Design (LEED). LEED is the nationally accepted benchmark for the design, construction and operation of high performance green buildings. LEED gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings’ performance. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. Modular Genius strives to achieve LEED standards and GREEN building practices with every project.



GREEN Favored Materials Used:	
Moisture Protection:	Wrap Under Floor and Building Wrap on Exterior Walls
Insulation:	Upgraded Throughout and Interior Walls
Siding:	Low Maintenance High Durability Steel
Roof:	White EPDM Reflective Energy Reducing Covering
Windows:	Low Emitting “Low E” Reflective Glass Coatings / Double Insulated
Doors:	Insulated doors and frames
HVAC:	Programmable Thermostats / High efficiency HVAC unit optioned
Plumbing:	Low Flow Toilets / Waterless Urinals / Electronic Infrared Sink Facets
Electric:	Occupancy Lighting Controls and Energy Efficient Lighting
Day Lighting:	Sky Light in Open Area



[Highlights in Blue Hyperlink to product data sheets](#)

Use group: B-Business, E-Education, A-Assembly
Construction type: VB

Floor:

Frame: 12" Perimeter Steel Main beams w/Cross members @ 48" oc spacing
Bottom: 1 Mil Cross-woven polypropylene fabric under flooring
Insulation: R-21 Un-faced F/G
Joists: 2 x 6 @ 16" oc Longitudinal
Decking: Single layer 3/4" T&G OSB underlayment (Advantech)
Finish: 26oz Commercial carpet, Shaw "Ambition" or equal
Finish: 1/8" Vinyl tile (12" x 12"), (Armstrong) Restrooms

Exterior Walls:

Studs: 2 x 4 #2 SPF @ 16"oc, 8'-6" high, single top plate & single bottom plate
Interior: 1/2" Gypsum
Covering: Vinyl covering over gypsum
Insulation: R-15 Kraft faced F/G Batts
Exterior: 26 gauge High rib steel siding
Trim: 26 gauge High rib steel trim @ top, bottom, corners, & around doors and windows
Sheathing: 7/16" OSB w/Building wrap (DuPont Commercial Wrap Tyvek)

Interior Walls:

Studs: 2 x 3 & 2 X 4 @ 16" oc, 8'-0" high
Interior: 1/2" Vinyl covered gypsum
Covering: Vinyl covering over gypsum
Insulation: R-11 Un-faced F/G in all partitions

Interior Trim:

Base: 4" Vinyl cove base, except 6" Vinyl cove base in bathroom (Armstrong)
Corner: Vinyl covered battens
Ceiling/Wall: "White" Suspended ceiling wall angle

Roof:

Mate line: (1) Layer 1-1/2", 2.0 LVL (Max span 30'-0")
Rafters: 2 x 8 Roof rafters @ 16" oc spacing
Skylights: 2x4 Flat roof commercial skylight
Ceiling: 2 x 4 Acoustic suspended ceiling, USG "Radar" tiles (Class 'A')
Grid: Donn DX Ceiling grid - USG
Insulation: R-30 Un-faced F/G Batts
Sheathing: 7/16" OSB w/ 1/4" Dens Deck
Roofing: .045 EPDM Rubber roof "White"
Gutters: Aluminum J-Rail along length with site install Aluminum Gutters

Windows:

Size/Qty: 3/0 x 4/0
Type: "White" vinyl framed single hung vertical slider, Silver line #1400 series w/Fiberglass insect screens
Glazing: "LOW E" double insulated glass
Trim: Vinyl covered wood return & casing
Blinds: 1" Vinyl mini blinds

Interior Doors:

Size/Type: 3/0 x 6/8 Solid core pre-finished wood grain, Ceco or equal (20 Min rated) w/Painted steel frames, Timely
Hardware: 4.5" x 4.5" Spring hinges
Levers: Passage lever sets, Tell (US26d Finish or equal)
 Keyed entry lever set , Schlage compatible Tell lockset (US26d Finish or equal)
 Floor mounted doorstops



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Exterior Doors:

Size: 3/0 x 6/8
Type: Pre-hung 20ga Commercial steel door w/18ga steel frame
Hardware: 4.5" x 4.5" NRP ball bearing hinges
5" x 20" Vision Panels
Closer: Door Closer, Tell #12641 (Grade 2) or equal
Panic Bar: Panic hardware, Tell #8300BE (Grade 2) or equal
Exterior keyed lever trim, Tell #CTL881C (Grade 2) or equal
Weather-stripping, Aluminum threshold and drip cap

HVAC:

Equipment: 36,000 Btu end wall mounted stepped capacity, green refrigerant, heat pump unit
Supply: F/G in ceiling w/24" x 24" Grid mounted adjustable diffusers
Return: F/G in ceiling w/24" x 24" Grid mounted grilles
Exhaust: 150-cfm exhaust fan
Thermostat: 7-Day Programmable heat/cool

Plumbing:

Supply: Type 'L' copper pipe & fittings
Waste: Schedule 40 PVC pipe & fittings
Water Heater: 6-Gallon tank type w/plastic water heater pan
Lavatory: ADA Accessible wall hung china, American Standard #0321.026
Electronic Faucet: W/ a 4-3/4" (12.1 cm) spout, brass constructed, and electronic infrared sensor
Toilet: Low Flow - (2) ADA Accessible handicapped bowl tank type toilet, Gerber #21-728 w/open front seat
Elongated bowl tank type toilet, Gerber #21-762 w/open front seat or equal
Sink: 15" x 15" Stainless steel coffee bar sink w/8" gooseneck faucet
24" x 24" Fiberglass service sink w/8" swivel faucet
Urinal: Wall hung Zero Flush Waterless Urinal 24" or equal
Accessories:
Toilet paper holder: Single roll toilet paper holder
Mirror: 18" x 30" Framed Mirror
Grab Bar: Stainless steel grab bar, (Borbrick #B5806-18, #B5806-36, #B5806-42)
Steel urinal screen: Wall mounted enameled steel urinal screen
Partitions: Overhead braced enameled steel modesty partition and handicapped modesty partition

Electrical:

Service: 120/240V Single phase / 3 Wire
Panel: Cutler Hammer #BR1630B150PK breaker
Raceway: Romex/MC cable, Per NEC Code (#12 AWG Minimum)
Lights: 2 x 4 Four-tube grid mounted fluorescent lights w/T-8 lamps
Ext Lights: 13W Fluorescent lights w/Battery back-up emergency feature @ exterior doors (Photocell controlled)
Receptacles: 120V/15A Duplex "White"
120V/15A Duplex GFI "White"
120V/15A under floor heat tape receptacle w/In use waterproof cover
120V/15A GFI @ HVAC unit w/In use waterproof cover
120V/15A "White" Toggle switch, as needed (Dual switched per IECC)
Switch: Wall Mounted occupancy sensor
Sensor / Wall: 120V/AC 60Hz, 360 degree, 530 square foot coverage
Exit/Sensor: Ceiling mounted occupancy sensor
Sensor / Ceiling: Dual head exit/emergency light w/ 90 Minute battery backup
Emergency: Locations w/Single gang boxes and 1/2" flexible conduit above ceiling for equipment to be installed on site
Voice/Data: Locations w/Single gang metal boxes and 1/2" EMT conduit to above ceiling for equipment
Fire Alarm:

Furniture:

Countertop: 7'-0" x 25" deep laminate w/4" backsplash
Cabinets: Light medium oak as follows:
42" Sink base cabinet
42" Base and Wall cabinet

Brands may be substituted for an "or equal"