GENERAL:

NU Facilities shall approve selection of materials, means and methods. Unless otherwise approved, design intent requires means and methods that provide minimal disruption to adjacent building activities and operations. When working on or adjacent to existing buildings, match existing materials, profiles, sizes and color as closely as possible.

All materials must comply with ASTM standards or better.

ROUGH CARPENTRY:

Rough Lumber: (All lumber must be S4S unless otherwise noted.)

- 1. Studs: fir or SPF "Stud" grade.
- 2. Light framing: hem-fir, "standard & better."
- 3. Steel studs for interior framing.
- 4. Structural joists & rafters over 6" deep; fir "#2 & better."
- 5. Douglas fir for strength or resistance to weather if required. Avoid exposure of hemlock to weather.

Plywood: CDX unless higher grade is specified.

Pressure treated wood: For all wood in contact with concrete or earth. Use extra-heavy treatment for wood in contact with earth.

Fire-retardant treated wood and GWB shall be used where required by the building code.

Expansion anchors: Hilti "drop-in," "sleeve anchors", "Kwik-bolt anchors," "nail-ins".

Lead anchors are prohibited.

Hardware in contact with pressure treated wood, including fasteners and connectors, shall be Stainless Steel.

Submit all materials for approval

ARCHITECTURAL WOODWORK:

Sustainable Considerations: Avoid depletion of natural resources by specifying wood species from sustainable sources, such as FSC Certified Wood or regionally manufactured from abundant species. Avoid use of exported or exotic species such as mahogany that are limited in supply or not sustainably.

Woodwork: AWI "Custom" grade typical; "Premium" grade for door frames, sidelights, and laboratory casework.

Include the following for laboratory casework:

Five knuckle exposed hinges;

Solid wood drawer sides;

Plywood drawer bottoms with chemical/moisture resistant finish;

150 lb. drawer glides with return;

Solid, epoxy resin tops;

Chemical resistant plastic laminate shelving;

Under cabinet lighting.

Countertops: may include non-wood products such as recycled glass, cast concrete, recycled content synthetic cast slabs, regionally quarried stone, recycled plastic solid surfacing, or plastic laminates.

BUILDING INSULATION:

Fiberglass Batt Insulation: shall be installed to minimize exposed fiberglass in areas needing to be accessed for inspections, maintenance, etc. Designs should encapsulate fiberglass using foil or pre-applied backing, or plastic or gypsum board covering.

Roof insulation: shall achieve a minimum of an R-30 rating, for both flat and sloped roofs.

Sustainable considerations: maximize insulation value to conserve energy; avoid insulation containing formaldehyde or ammonium sulfate or foams expanded with hydrochlorofluorocarbons (HCFCs); consider insulation with recycled content.

ROOFING AND ROOF ACCESSORIES: (in accordance with BEA Assoc. prepared specifications)

The preferred roofing style for Northeastern Buildings is TPO single-ply, 80 mil minimum thickness.

Flat roofs shall be white in color. Solar reflectivity shall meet Virginia Energy Conservation and Environmental Standards (VEES).

Specify service walkways (minimum 2'0" wide) appropriately located to service all roof top equipment from the roof access.

Copper Flashing between parapet walls and capstone

Copper Gutters and downspouts shall tie directly to an underground storm drainage system.

Snow guards shall be installed over entrances on all roofs with a slope of 6 in 12 or greater.

Specify roof hatches that are insulated and lockable.

Roofs shall have a 30-year warranty.

EXTERIOR DOORS: (Automatic)

Handicapped-accessible entry doors should be power operated. Operators should be Electro-Mechanical with power assist option. Both doors in a vestibule configuration should be power operated. Power operated egress doors shall have electronic strike or latch to allow power operation during times when the building is locked.

Power operators shall have auxiliary contacts to allow for card reader and proximity reader activation of the openers.

INTERIOR DOORS:

Wood Doors: Interior doors birch, stain grade, solid core.

All doors in new construction shall have lever handles that comply with ADA requirements. When renovation work requires changing door hardware or which hardware change is requested for functional change, all replacement hardware shall include ADA compliant lever handles.

Hollow Metal Doors: Commercial quality, level, cold-rolled steel conforming to ASTM A-366 and free of scale, pitting or other surface defects.

Glass & Glazing: Shall be laminated or tempered as required

LOCKSETS:

NEU Facilities Door Hardware and Locking Standards

- Stanley Best 9K Series Heavy Duty locks/Levers
- Stanley Best Small Format Interchangeable Core (SFIC) Locks
- CBORD CS Gold Online Access Control System
- Schlage AD400 Wireless Electronic Locks (Online Applications) Note a 5" minimum door style/trim is required to accommodate this lock
- Stanley Best Keypad EZ Locks (Offline Applications) Note a 5" minimum door style/trim is required to accommodate this lock
- Allegion LCN 4000 series door closers
- Allegion Von Duprin 99 exit devices

PAINTING:

A 0% VOC paint is the preferred standard to be utilized for all interior applications, with a maximum 10% by volume for emissions, and 0% in VOC content, unless a specific exemption is authorized during the design process.

New Construction: Primer plus minimum two coats required for new constriction **Repaint and Touch-up** (incl. Summer Dorm upgrade): Patch and sand blemishes, holes until nonvisible. Minimum two coats. Types and colors will, as much as feasible, match existing.