DIVISION 09 – FINISHES

General: Apply to all sections:
Consider finishes that perform multiple purposes such as whiteboards that can be written on, projected on and protect the wall.
Consider pairing polished concrete with radiant in-slab hydronic heating.

Accessibility: Meet OSSC, ANSI 117.1, ADA and Principles of Universal Design.

Historic: Identify interior finishes that contribute to the historic qualities of each school.

Protect wood moldings and trim and prohibit cutting for conduit, raceway and piping.

Do not paint woodwork with an existing transparent finish.

Historic finishes like terrazzo, stone, plaster, bronze are durable and should be retained and/or reused. Consider the use of long-term, higher initial cost materials when selecting new finishes.

Reference the SHPO Programmatic Agreement for Energy Efficiency, Weatherization, Rehabilitation and Interior Retrofit Projects, February 2012, Stipulation II C – Interiors and Stipulation II F – Painting, to determine what activities are allowed at Historic Register eligible schools without prior SHPO review.

Sustainability: Selection of materials that promote a healthy environment on a wholistic level are preferred. Use of materials and systems that directly affect the health of building occupants are required to meet applicable sustainability standards.

Meet the VOC and other requirements for LEED for Schools Low-Emitting Materials.

Consider the life-cycle impacts of material choices.

Material sourcing and ingredient transparency should be considered in material selection and submission of Health Product Declarations, Environmental Product Declarations and ILFI Declare Label should be included whenever possible.

Use of healthy materials that meet the requirements of established standards such as Living Building Challenge Red List Free, Cradle to Cradle, Green Guard, CHIPs or Building Green Approved is encouraged.Other: Interior finishes and colors should contribute to the creation of an enriched and healthy learning environment. Care should be taken to select finishes and colors.

All finishes should be long-lasting and low maintenance.

Select finishes that are appropriate for the substrate over which they are applied.

Include requirement for overstock.

Refer to Floor, Wall, Ceiling Finish Table on page 12 of this document.

A. WALLS -
   1. School walls should be designed to withstand considerable impact and abrasion. Include 4’ high minimum wainscoting paneling or 6’ high minimum veneer plaster finish in renovations and new construction in corridors and other high traffic spaces.
   2. Program spaces change frequently so all occupied areas should be considered “student” spaces.
   3. Finishes should be easy to clean and repair.
   4. The wall needs to accommodate many functions from 3’-0” to 7’-0” AFF including: Student art, educational displays, school information, marker boards and acoustic panels.
   5. Provide backing and strapping for current and future needs.
   6. Provide ample tack/mounting strips for school displays and student work.
   7. Design walls to meet sound transmission and noise reduction requirements for the intended use. Balance hard and soft for distribution and appropriate volume of sound.
   8. Metal protection at exposed corners, etc. Match corner protector height to wainscot height. For walls without wainscot paneling, use minimum 4’ corner protectors in general areas, and minimum 6’ corner protectors in service areas.
   9. Refer to Floor, Wall, Ceiling, Finish Table on page 12 of this document.

B. FLOORS
   1. School floors should be designed to withstand considerable impact and abrasion. Hard durable surfaces are preferred including polished concrete where applicable. See individual sections for standards.
   2. Design floor finishes that meet sound transmission and noise reduction requirements for the intended use. Balance hard and soft for distribution and appropriate volume of sound.
   3. Floors should be designed to minimize cleaning and maintenance needs. Routine cleaning products should be water-based (to greatest extent possible) and should not contribute to poor indoor air quality.
   4. Provide surfaces that meet slip-resistance and visual contrast at transitions.
   5. Detail finish transitions to minimize damage to materials, janitorial problems and tripping hazards.
   6. Provide 10-ft minimum transitions (walk-off mats/grilles) at all exterior entries.
   7. Avoid installing resilient finishes over plywood which may permanently deform.
   8. Trowel on manufacturer’s recommended cementitious patching/leveling compound to produce a visually smooth sub-floor.
   9. Coordinate floor finish durability with rolling and sliding furniture.
   10. Floor finishes should contribute to the desired room acoustics and daylighting (light reflectance).
   11. Coordinate with 03 30 00 to avoid high moisture content in concrete with adhered finishes.
   12. Required finishes for specific rooms include:
      a. Classrooms PreK-12: polished concrete, resilient flooring
      b. Classrooms PreK-5 soft areas: carpet tiles
      c. Extended learning: polished concrete, resilient flooring, carpet tiles
      d. Computer Labs: polished concrete, anti-static resilient tile
      e. High School Science Labs: chemical resistant resilient sheet with welded seams or polished concrete if appropriate to chemicals being used.
      f. Cafeteria: polished concrete with stain resistant sealer, resilient sheet
      g. Kitchen: Slip resistant safety flooring.
      h. Gymnasium: Wood flooring is required at high schools and preferred at middle schools and K-8. Resilient athletic flooring is appropriate at K-8 where wood is not feasible.
      i. Offices: Carpet tiles
      j. Mechanical/Electrical: sealed concrete
      k. IT Closets – Shall be static dissipative
      l. Toilet & Locker Rooms: Polished concrete (with stain resistant searler at toilet rooms), Ceramic tile.
      m. Auditoria: polished concrete (under seating), carpet in aisles.
      n. Art/elective rooms: polished concrete, resilient flooring.
      o. Corridors: polished concrete, resilient flooring
      p. High School Main Stage: A wood stage floor, with sleepers, resilient pads, plywood and a topping layer of tempered hardboard, painted a special black. Includes cove base, expansion joint covers and other elements. A heavy-duty floor for serious drama use, friendly to dance and very durable.

q. High School Black Box - Drama Class - Rehearsal Studio: A wood stage floor, without sleepers, with more robust resilient pads, plywood and a topping layer of tempered hardboard, painted a special black. Includes cove base, expansion joint covers and other elements. A medium-duty floor for everyday drama use, friendly to dance and very durable.
r. High School Dance Studio: A hybrid wood and isolation pad system, without sleepers, and plywood subfloor layers, with a hardwood strip finished floor top, using a low VOC oil finish, and a roll-out/tape-down vinyl “marley” overlay when desirable for the type of dance. A durable floor with adequate spring for most dance forms, except Odissi, Flamenco, Clogging, Irish and other high-impact percussive dance styles.
s. High School Wresting: Rubber athletic flooring
t. High School Weight Room: rubber athletic flooring
u. High School Band: polished concrete, resilient flooring

13. High School Choir: polished concrete, resilient flooring
See 09-60-00 for additional general flooring guidelines.
14. Refer to Floor, Wall, Ceiling, Finish Table on page 12 of this document.

C. CEILINGS
1. School ceilings to be designed to contribute to the desired room acoustic and lighting goals.
2. Ceiling is preferred location for soft, sound absorbing materials. Balance hard and soft for distribution and appropriate volume of sound.
3. Ceilings in occupied areas to be 9’-0” AFF min. (unless approved) to avoid student contact.
4. Acoustic Tile Ceilings should not be used in rooms where activities would commonly impact the ceiling.
5. All access panels, lighting, diffusers and ceiling mounted devices should be shown in the architectural reflected ceiling plans, to coordinate with other trades. Devices should align to create visual cleanliness. Access panels should be located away from casework for safe ladder access.
6. See Divisions 21-28 for labeling of devices mounted above ceilings.
7. Refer to Floor, Wall, Ceiling, Finish Table on page 12 of this document.

09-20-00 Plastering and Gypsum Board

A. For minor building remodels and renovations, match surrounding finishes.
B. The district prefers veneer plaster finishes, particularly where impact-resistant surface is required. See 09-26-13
C. Add corner guard/protection at all exposed corners to reduce damage.
D. Use impact-resistant surface at 6' and below in all corridors and circulation spaces. Use impact-resistant surfaces at 12' and below in gymnasiums

09-21-13 Lath and Plaster

Historic: Reference National Park Service, Preservation Brief 21, Repairing Historic Flat Plaster Walls & Ceilings, Mary Lee McDonald, 1989;
Reference National Park Service, Preservation Brief 23, Preserving Historic Ornamental Plaster, David Flarehty, 1990

A. For minor building remodels and renovations, match surrounding finishes.
B. Avoid textured finishes because these are difficult to clean and repair.
C. Apply 3 coats of gypsum plaster, minimum 3/4” thick at concrete and block walls.
D. Shower rooms with ceramic tile. Cement plaster over metal lath. Expansion joints at 4 feet o.c. and/or glass fiber reinforced.

09-21-16 Gypsum Wallboard

A. Wainscoting, tile or veneer plaster finish required for high traffic areas (hallways, restrooms) due to durability. See section 09-26-13.
B. For minor remodels and renovations, match-surrounding finish texture.
C. All gypsum wallboard products shall be 5/8” Type X, fire resistant rated gypsum board for durability and flexibility of spaces ASTM C1396.
D. Finish level, based on GA-214-96, “Recommended Levels of Gypsum Board Finishing”
1. Provide minimum Level 3 to Level 4 finish at mechanical, electrical, custodial and storage rooms.
2. Provide minimum Level 4 to Level 5 finish at classrooms and other rooms where lighting does not highlight wall surface and paint sheen is satin or eggshell.
3. Provide minimum Level 5 finish at corridors, restrooms, cafeterias, gymnasiums and other locations where gloss/semi-gloss paint sheen is used or in critical lighting areas.
E. Where gypsum wallboard joins dissimilar materials, specify and detail on the drawings the type of trim to be used. Ensure detail is vandal/impact resistant.
F. Moisture resistant wallboard required at all wet locations which do not receive tile, including: restrooms, laundry areas, kitchens, custodial rooms, behind drinking fountains, eyewash, chemistry lab showers and sinks. Extend 3’ around water sources on both sides of the wall assembly. Provide at ceilings within shower rooms.
1. Meet ASTM C1178 and mildew resistant ASTM D3273.
2. Thickness: 5/8 inch.
3. Edges: Tapered.
4. Mold-Resistant Paper-Faced, Glass-Mat-Faced, or unfaced products preferred over mold-resistant due to environmental health concerns;.
a. Example Mold-Resistant Paper-Faced Products:
i. American Gypsum; M-Bloc, Mold and Moisture Resistant.
ii. CertainTeed Gypsum; ProRoc Brand Moisture & Mold Resistant Gypsum Board with M2 Tech or M2Tech Gypsum Board or AirRenew Gypsum Board with M2Tech.
iii. Georgia-Pacific Gypsum; ToughRock Mold-Guard and ToughRock Mold-Guard Type Gypsum Wallboard.
iv. National Gypsum Company; Gold Bond Brand XP Gypsum Board.
v. USG Corporation; Sheetrock Brand Mold Tough Gypsum Panels.
b. Example Glass-Mat-Faced Products:
i. Georgia-Pacific Gypsum; DensArmor Plus.
ii. USG Corporation; Sheetrock Brand Glass-Mat Panels Mold Tough Firecode X.
c. Example Unfaced Product:
i. USG Corporation; Fiberock Aqua-Tough Interior Panels.
G. Tile backer board required at ceramic tile finishes.
H. Impact-Resistant Wallboard

1. Meet the requirements of ASTM C1629/1629M
2. Thickness: 5/8”
3. Example products:
    a. Georgia Pacific DensArmor Plus Impact-Resistant Interior Panel
    b. USG Sheetrock Mold Tough VHI (Very High Impact) Firecode Core Gypsum Panels
    c. American Gypsum M-Bloc Impact Resistant Type X Gypsum Board
4. Use of Abuse-Resistant Gypsum in place of Impact-Resistant Gypsum is not acceptable.

09-22-00 Supports For Plaster and Gypsum Board

A. Provide minimum 20-gauge steel studs for framing.
B. Space studs 16-inches on center unless otherwise required. Provide bracing to meet OSSC for seismic resistance.
C. Provide double studs at doors and openings. Extend double studs full height to structure above.
D. Suspended ceilings to be designed to current Oregon Structural Specialty Code (OSSC) seismic requirements.
E. Metal Trim and Accessories
    1. Install casing beads at exposed edges of plaster and drywall.
    2. Install control joints at each door or sidelite jamb. Head to ceiling and sill to floor.
    3. Install corner beads with 1-1/4" minimum width flange at outside corners.

09-26-13 Veneer Plaster Base

A. This is the preferred wall finish in all areas occupied by students for durability and maintainability. Where impractical due to cost, prioritize corridors, gymnasiums and other higher impact and less supervised areas.
B. Provide high-strength gypsum veneer plaster per A STM C 587. Example brand: Imperial Plaster.
C. 1/8” thick plaster skim coat, hand trowelled smooth finish.
D. An acceptable product (one-component) is USG Corporation; Imperial Finish Plaster.
E. Provide 5/8” GWB or ½-inch thick plaster base substrate. ASTM C588.
F. Provide anodized or prefinished trim as recommended by manufacturer to limit cracking and isolate portions of the wall for repair.

09-30-00 Tiling

A. See beginning of Division 9 for general guidelines. Solid color tiles required for ease of match in repair.
B. Ensure slip resistance is adequate for safety in wet locations and meet requirements as outlined in 09 60 00. Minimize grout lines. Seal grout to prevent penetration and improve cleaning ease.
C. ANSI A108/A118/A136.1 and A137.1 Specifications for the Installation of Ceramic Tile Version 2011.1 is the minimum standard. Design professionals are also encouraged to consult the current TCNA Handbook for Ceramic, Glass, and Stone Tile Installation.
D. Ceramic Floor Tile
    1. Toilet rooms, unglazed, porcelain-type, standard grade, impervious.
    2. Provide large (+/- 12x12 min) tile to reduce the amount of grout, which is what requires most repair and maintenance.
    3. For shower rooms, use large tile with 7-1/2% abrasive content (for slip resistant) as the default specification. The District is interested in non-slip, non-textured floor tile products due to ease of maintenance. Smaller tile sizes are permitted as necessary for multi-directional slopes in showers.

E. Ceramic Wall Tile
    1. 4-1/4 x 4-1/4 and 6 x 6 (min) preferred to reduce the amount of grout.
    2. Smooth, glazed, bright or satin finished, standard grade.
    3. Toilet Rooms, preferred to extend tile to top of partitions, approx. 6’-0 Coordinate height with wall mounted accessories (including OFOI), top of partitions, top of urinals, etc. Show all relationships on interior elevations to avoid bridging edge of tile.
    4. Shower room, full height.
    5. Coved base at intersection of wall and floor surfaces.
    6. Select wall tile with trim pieces including inside and outside corners, and bullnose top.

F. Unglazed Ceramic Wall Tile - Not permitted due to poor maintenance and durability.
G. Grout
    1. Provide non-porous polyurethane or epoxy grout to avoid cracking, staining and odors.
        a. For walls, use polymer modified cement grout. Example: Laticrete PermaColor
        b. For floors, use epoxy grout. Example: Laticrete Spectra LOCK 2000 IG
    2. White grout is prohibited due to discoloration. Medium to dark color grout is required for floor tile.
    3. Avoid contrasting colors to minimize intensive cleaning and repair.
H. Floor Tile Installation
    1. Wet areas, toilet rooms, showers and dishwashing areas: set in full mortar bed. When installed over concrete, thinset is acceptable.
    2. Provide fluid applied waterproof membrane and uncoupling membrane for crack resistance. Ensure compatibility with latex modified setting materials. Example: Laticrete HydroBan
    3. Slope slightly to drains, not exceeding ADA-AG guidelines. At existing slabs, slope is required immediately adjacent to drain.
    4. Seal all joints between tile and plumbing fixtures.
I. Wall Tile Installation
    1. Showers: Tiles set in full mortar bed or over moisture resistant ceramic tile backer board, ASTM C1178 or ASTM C1396 and mildew resistant ASTM C3273.
    2. Restroom walls and base: thin-set over moisture resistant ceramic tile backer board, ASTM C1178 or ASTM C1396 and mildew resistant ASTM C3273.
    3. Seal all joints between tile and plumbing fixtures.
J. Final Cleaning
    1. Clean tile without residue per manufactures specifications.
    2. Install sealer as per manufacture specifications for non-epoxy grout. No sealer required or recommended on glazed tile.

09-51-00 Acoustical Ceilings

A. See beginning of Division 9 for general guidelines.
B. Owner shall approve suspended ceiling systems as early as possible in the design phase. Design team shall coordinate ceiling grid layout with layout of lighting and other accessories. Layout of grid should be symmetrical within a space and designed in a way to minimize waste. Ensure that narrow strips of tile are avoided.
C. High school and middle school corridors – avoid suspended ceilings below 9 feet minimum. No acoustical treatment at stairwell ceilings that are within reach.
D. Mechanically fasten acoustic panels, do not adhere to wall finish. Avoid adhesive mounted acoustic ceiling panels in new construction.
E. At Gymnasiums, provide District approved impact-resistant mechanically fastened acoustic panel.
F. The District encourages salvage and reuse of ceiling tiles to assure match on remodels.
G. Kitchens and serving areas. Provide fiberglass reinforced panels (FRP) mechanically fastened or equally durable, washable acoustical tile surface. Example: Armstrong, Ultima Health Zone Item No. 1938.
H. Acoustical ceilings to be designed to current Oregon Structural Specialty Code (OSSC) seismic requirements. Indicate seismic trim and coordinate with sprinkler system.
I. Consider using ceiling tile with high recycled or bio-based content.
J. No vinyl or vinyl-faced tiles due to IAQ and life-cycle air quality issues.
K. Provide Moisture Resistant ACT in high humidity areas. Do not use ACT in restrooms or shower rooms.
L. High-density, mineral fiber acoustic ceiling tile preferred to minimize damage caused by accessing the ceiling plenum.
M. Fiberglass ceiling tile is acceptable when required to meet acoustical performance criteria, upon District approval. This should be in low access areas and not below a return air plenum which soils the tile.
N. Standard sizes: 24” x 48” for suspended ceilings,. Larger size ceiling tiles arenot allowed .
O. Minimum Standards for panels:
    1. Light reflectance: 0.89-0.90 - higher light reflectance resulting in better light reflection from suspended light fixtures.
    2.
    3. Recyclable.
    4. Noise Reduction Coefficient (NRC) 0.70
    5. Ceiling Attenuation Class (CAC) 35
    6. Low Emitting
P. Examples:
    1. Ultima 1913 – Square lay-in, 2 x 4
    2. USG Mars ClimaPlus 88185
    3. CertainTeed Performa Tx Symphony 1220-RXS-1
Q. Suspended ceiling installed with nominal 1-inch ceiling grid and perimeter wall angles. A 9/16” grid is not allowed because the thinner bearing surface results in more tile failure. Color: white.
R. If the acoustical ceiling is part of a fire-rated assembly, the fire-rated design criteria must be indicated on the drawings.
S. Provide for identifying ceiling panels where access to mechanical equipment and valves is required. The identification may take the form of a small tag mounted to the face of the tile. See Divisions 21-28 for labeling requirements.
T. Pop rivet wall angle to “T” grid intersections for long term durability.

09-60-00 Flooring

A. See beginning of Division 9 for general guidelines and table on page 12 for preferred locations for various flooring types.
B. All flooring shall be stable, firm, and slip resistant and meet requirements of section 302 & 303 of ICC A117.1. Particular attention should be paid to slip resistance in wet locations. Provide changes in texture/color/material where needed for visual cues.
C. Slip Resistance:
    a. 0.6 min. coefficient of friction at level floors.
    b. 0.8 nominal coefficient of friction at ramps and sloping floors.
D. Installer requirements: Installers shall be certified/approved by the manufacturer of the flooring product, if applicable per manufacturer. Due to District past experience with installation issues, all products selected shall have multiple locally based approved installers. NO SUBSTITUTIONS shall be approved which does not meet this requirement.
E. District priority for new floors in major renovations, new construction or substantial floor replacements is to remove maintenance requirements for waxing and polishing. However, in existing buildings with primarily waxed surfaces, floor replacements with the same maintenance requirements are preferred. The exception to the requirement is the District preference for exposing existing concrete floor as finish, if existing condition is acceptable.
F. Removal: Removal of old flooring shall be performed by mechanical means only. Do not use solvents to remove old flooring, because solvent residue may act to prevent proper adhesion of new flooring.
G. Testing and Abatement: Describe the extent and nature of asbestos containing materials (ACM) and proposed removal or abatement, disposal, protection of the building, and details of any special conditions at the job site. Work is to be completed by an accredited person holding a current certificate of continuing training as required by Federal and State regulations.
H. Substrate:
    1. Flooring substrate to be identified when specifying flooring products. Designer is responsible for verifying that substrate is appropriate for proposed flooring material.
    2. Verify integrity of existing substrate before applying new flooring. Replace/repair any subpar substrate. Never apply new flooring over poor substrate. If minor unevenness exists, consider appropriateness of selected flooring. Avoid telegraphing. Review attachment of wood substrates prior to installation of new flooring and increase attachment if necessary.
    3. Concrete – After the old flooring is removed, concrete floors should be bead blasted then sealed with moisture limiter if needed, before installation of patching and leveling compounds.
    4. Topping slab - Use multiple coats of leveling compounds (3 coats) which are compatible with the flooring manufacturer’s adhesive.
    5. Wood Substrate - Where existing substrate is plywood, verify condition is appropriate for new flooring and replace if necessary. Carefully inspect joints to prevent telegraphing through new flooring. Mechanically attach all plywood. Do not use standard penny nails. Use ring-shank nails, screws, or approved alternative. Provide sealant as suggested by manufacturer to avoid wood absorbing adhesive. Typically, a urethane-based adhesive would be appropriate, but should be verified.
    6. Check / coordinate moisture content meets manufacturer’s requirements for applied finishes. Use manufacturers recommended moisture limiter coating if moisture mitigation is required.
I. Adhesives:

1. Ensure the adhesive is appropriate for specific substrate condition. Never install new floor over inadequate substrate. Urethane adhesives tend to work well on plywood substrates, verify with manufacturer of adhesive and flooring.

J. Flooring Product: Antimicrobial treatments introduced in the manufacture of flooring products or applied to the finished product are not allowed.

K. Finishing: New flooring should be finished by contractor per manufacturer's recommendations. Provide burnishing, polishing, or waxing, as required.

L. First Floor Cleaning: Shall be included in the base bid of work and performed per the manufacturer's instructions.

M. Considerations for floor selection:

1. The A/E shall include colored floor pattern drawings and color samples and material presentation boards submitted to the District for review during design development.
2. Appropriateness of material on existing substrate material and condition of substrate.
3. Abrasive, matte finish or difficult to maintain/mop surfaces should not be considered.
4. Matching adjacent materials and/or cleaning and finish.
5. For existing schools with existing Vinyl Composition Tile (VCT): VCT is preferred for consistent building maintenance, performance and durability at floor patching and replacement. See 09-65-16 Resilient Flooring
6. For new schools and modernizations: Provide polished concrete and/or linoleum flooring option with bio-based material content to remove waxing requirements.
7. Consider polished concrete when paired with acoustic ceiling and/or wall panels.
8. Locker Rooms: polished concrete, or ceramic tile.
9. When carpet is desired for acoustics, functions, or other reasons, consider increased use of newer hybrid resilient carpets where fibers are fused directly to a non-PVC closed cell cushion backing system. Seams are chemically welded making them impermeable to moisture. These carpets employ high-density construction and low pile heights that are more durable and easier to maintain than standard carpet. Flooring to be supplied with a low VOC factory applied adhesive.
10. When removal of ACM flooring such as magnecite is not possible or reasonable, provide a fluid-applied product such as Semco or a resilient floor that will warranty their product when installed over magnecite.

N. Ramps:

1. Polished concrete or rubber flooring should be used at ramps and sloping floor.
2. Pre-fabricated metal ramps should not be used for interior spaces unless temporary. If used, locate directly next to the wall without a gap.

O. Rubber Reducing Strip: Install edge reducing strips at all exposed edges of flooring in doorways or borders of different finishes.

P. Slip resistance: Find right place to consolidate slip resistance information.

1. 0.6 min. coefficient of friction at level floors.
2. 0.8 min. coefficient of friction at ramps and sloping floors.
3. Min. coefficient of friction at wet locations are difficult to test and lack clear industry standards. Choose materials intended to be slip resistant and review with the District. OSHA has recommended a Static Coefficient of Friction (SCOF) of 0.50 for workplace environments, wet or dry.

09-61-00 Floor Treatment - Concrete

A. Resurfacing of existing concrete floors: The district encourages the use of materials and methods to harden and polish existing floors when conditions are acceptable. This is due to the decreased maintenance and lifecycle costs.

B. In new construction polished concrete is a preferred, long-lasting, low-maintenance floor finish.

1. Permanent penetrating stain/tint is acceptable, because it is long-lasting. Surface color coatings are prohibited.
2. New concrete floor finishes may vary depending on use:
   a. Use high polish (800 grit or greater) and densifier at highly visible public areas.
   b. Use a lighter grind (minimum 200) and densifier at typical public use spaces such as classrooms.
   c. Back of house utility spaces use clean and seal finish.
   d. Coordinate with sections 03 30 00 and 03 35 13.
3. Fill expansion joints after concrete is fully cured.
4. Use stain resistant sealer at bathrooms and where food spills might occur such as cafeteria/commons.
5. Consider hardness of finishes and their ability to resist moving furniture, equipment/rollers, etc.
6. Approved process and installer: submit product data and examples of installed finish to District for approval.
7. Means of construction should be carefully considered to ensure protection of floors to be finished.

09-64-00 Wood Flooring

A. Gymnasium: High School and Middle School Gymnasiums

1. Competition level flooring. Review performance options with the District.
2. Grade 1 or 2nd & Better Northern Hard Maple.
3. 2-1/4" wide and minimum 25/32" thick tongue and groove end matched or match existing.
4. Floating floor system in middle and high school gymnasiums.
5. Provide under-floor venting to prevent moisture build-up.
6. Provide concrete subfloor, with depressed slab sufficient to accommodate selected floor system. The slab shall be troweled smooth per product specification installation guidelines, high spots shall be ground and low spots filled with approved leveling compound.
7. Concrete subfloors on or below grade shall be adequately waterproofed beneath the slab and at the perimeter walls.
8. The slab shall be determined to be fully cured by industry standards.
9. Metal strip supports not acceptable.
10. Flooring system shall have been independently tested and meets or exceeds all Athletic Performance requirements according to the International Standard DIN 18032, Part 2, 2001. Final performance results do not allow averaging non-compliant test points to achieve DIN compliance.
11. Flooring system shall have been independently tested and evaluated for Engineering Performance according to the Structural Testing and Engineering Measures (STEM).
12. Provide and post signage showing acceptable floor loads for equipment at wood flooring.

B. Gymnasium: Elementary School

1. Determine floor performance to meet demands of particular site.
2. Grade 2 & Better Northern Hard Maple
3. 2-1/4" X 33/32" thick tongue and groove, end matched or match existing.

4. Must have perimeter gap for ventilation and expansion.

C. Existing Stages: Match existing wood flooring or replace with new, per section 09-65-51 below, adapted as appropriate to fit into existing recess..

D. Wood flooring at other locations is generally not recommended. However, wood may be appropriate in portions of historic buildings.

E. Install per manufacturers standard installation methods.

F. Provide forexpansion void per flooring manufacturer's recommendation at all walls and permanent obstructions for ventilation and expansion.

G. Wall Base: Heavy duty, molded, vented cove base.

H. Expansion joints may be required between flooring strips intermittently throughout the floor. Requirements will be determined by site and geographical conditions.

I. Finishes: Apply (2) coats of approved seal and (2) coats of approved finish per manufacturer's label instructions. Apply game lines and logos between seal and finish coat with compatible paint.

J. Annual Maintenance/Refinishing:

1. Recreational surfaces require periodic refinishing. The amount of use, abuse, and maintenance a floor receives will determine an appropriate schedule for refinishing. Most gymnasium floors should be annually recoated. If recoating biannually additional coats of finish may be required. Follow manufacturers coating instructions for your hardwood floor.

09-65-00 Resilient Flooring - General

A. Coordinate finish maintenance protocol with District staff. The District has limited staff to clean, renew and protect resilient surfaces so product selection must be low maintenance. See general flooring requirements above.

B. The A/E is encouraged to avoid light and dark flooring colors that will show scratches and scuff marks. Medium valued colors and marbled and other pattern types are encouraged. Review selections with District.

C. Indoor Air Quality: Resilient flooring materials and adhesives shall have low/no VOC.

D. Provide linoleum with bio-based material content.

E. Verify that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that interfere with adhesion of resilient products. Prepare substrate according to manufacturer's written recommendations to ensure adhesion of resilient product.

F. Refer to product manufacturer's recommendations for appropriate low VOC adhesive. Use only adhesives approved by resilient flooring manufacturer. See 09-60-00

09-65-13 Resilient Base

A. Remove existing base before applying new base.

B. Rubber Base:

1. 1/8" x 4" rubber base. In existing conditions, confirm 4" or 6" base requirement for replacement. (Vinyl base is not acceptable.)
2. Select water based adhesives.
3. Install top-set base on floor covering.
4. Install base on cabinets where scheduled.
5. Example of acceptable manufacturers: Johnsonite, Roppe, Burke, Flexco

C. Bio-Based Wall Base

1. NSF-332 Certified for sustainability.
2. Floorscore Certified for good indoor air quality.
3. Meets requirements of ASTM F1861, Standard Specification for Resilient Wall Base.
4. Example: Johnsonite Ecolibrium Finishing Borders

09-65-13 Stair Floor Covering

A. 1/8" sheet rubber.

1. Stair treads; pre-molded or extruded rubber risers.
2. 1/8" rubber base skirting.

B. Interior and exterior concrete stairs with non-slip metal safety nosing. (See Division 03-35-00 Concrete Finishing)

C. Ensure slip resistance balanced with ease of cleaning

D. The leading 2-inches of stair treads shall have a visual contrast per ANSI 117.1-504.

E. Where K-2 agreement is in place with the city, follow requirements of agreement for striping and signage.

09-65-16 Resilient Flooring

A. Ensure substrate is finished appropriate to prevent telegraphing and ensure adhesion.

B. Linoleum and rubber flooring are not allowed over plywood.

C. See 09-60-00 for installer requirements.

D. Acceptable locations; corridors, multi-purpose rooms, classrooms, storage rooms, dining rooms, and food serving areas with prior approval. Do not use linoleum in portable/modular classrooms due to extreme heat during summers and tendency to stack furniture.

E. Vinyl Composition Tile (VCT)

1. 1/8", low VOC
2. Acceptable locations at existing schools where matching existing flooring: corridors, multi-purpose rooms, classrooms, storage rooms, dining rooms, and food serving areas.
3. Not acceptable in restrooms, shower rooms or high school chemistry labs.
4. Example of acceptable manufacturer: Armstrong, Tarkett, Mannington Commercial.

F. Linoleum

1. Linoleum Installer Qualifications: Engage an installer experienced in linoleum installation and certified by the linoleum manufacturer as a "Master Mechanic."
2. Gauge: 2.5 mm min. thickness.
3. Stagger seams in wet locations, such as sinks or drinking fountains.
4. Do not install in restrooms.
5. Wear Layer: Use homogeneous linoleum comprised primarily of natural materials calendared in a two-stage process to ensure optimal dimensional stability.
6. Backing Layer: Woven jute bottom layer.
7. Fire Resistance:

a. Smoke Density: ASTM E662/NFPA 258, 450 or less.
b. Critical Radiant Flux: ASTM E684/NFPA 253, Class 1.

8. Sheet or tile products acceptable. At wet locations, provide sheet product with welded seams per manufacturer's recommendations.
9. Finish: Products to have a factory finish. Do not apply wax or other finish.
10. Example of acceptable manufacturers: Forbo Marmoleum, Armstrong.

G. Rubber flooring
1. Gauge: 3.5mm min. thickness for corridors and high use areas; 3.0mm min. thickness for classrooms.
2. Do not use light or dark colors due to dirt visibility. Medium hues preferred.
3. Dense, waterproof, non-porous surface.
4. Use rubber tiles, Rubber rolled product not acceptable due to difficulty with installation and flattening.
5. No welded seams in classroom or other non-wet areas due to difficulty in maintenance and cleaning.
6. Hardness: Static Loading ASTM F970 equal to or less than 0.003 in. (tested at 250lbs).
7. Withstand rolling loads such as bleachers, tables, and chairs. Recommended use of skid rails or boards of plywood to protect floor during construction and move-in.
8. Low gloss finish or molded product required for ease of cleaning. Porous surfaces and mat finishes are not allowed as they are difficult to keep clean.
9. Requires no additional waxes, coatings, or finish.
10. Ensure proper subfloor preparation and adequate curing of adhesives.
11. Initial, regular, and deep clean per manufacturer's instructions. Cleaning with auto-scrubber or swing arm with manufacturers suggested cleaner, allow water to stand per manufacturer, and rinse thoroughly with fresh water. Cleaning products with neutral PH (between 7 and 9). Solvent, phosphate, and phenol free.
12. Example of acceptable manufacturers: Nora Envirocare, Mondo Zeus, Mondo Harmoni with MondoShield or approved equal.
13. Use of recycled rubber products is prohibited.

H. Slip resistant safety flooring for food service, kitchen and dishwashing areas
1. Flooring shall be selected to provide adequate slip resistance while avoiding surfaces excessive abraision which can be difficult to maintain.
2. Example products:
a. For high use kitchens: Altro Atlas 40.
b. For lower use kitchens: Altro Reliance 25.
3. Use welded seams.
4. Thickness: 2.5 mm (lower use); 4.0 mm (high use).
5. Integral cove base.
6. Edge strips: metal.
7. Backing: Non-woven polyester/cellulose, glass fiber reinforcement.
8. Warrenty: 15 years.

I. Use standard manufacturer colors unless trying to match existing. Finish per manufacturer requirements.

J. When applying new flooring, ensure furniture in the space has appropriate glides. Provide nylon or similar glides for smooth movement of furniture. Do not use metal glides.

K. Where flooring abuts walls, door casings, pipes, etc. seal with an acrylic latex silicone caulk seal. Top set rubber base or wood base must be installed to all applicable areas after caulking.

09-65-51 Performing Arts Wood Flooring

A. [SFF-1] Main Theatre @ High School
1. Recessed Slab and Vapor Barrier
2. 2x4 Hem-Fir Kiln Dried Sleepers with neoprene kinetic pads on 16" centers
3. ¾" CDX Plywood Subfloor
4. 30# building paper
5. Pre-glued and fully bonded sandwich of ¾" A/C plywood upper floor with S2S "Signature Series" ¼" tempered hardboard finish floor by Decorative Panels International. Stagger 50% offset from subfloor.
6. Fasteners and adhesives shall be high-bond, fully spread between hardboard and upper plywood.
7. Prep, sand, clean and special paint finish with Sherwin Williams "ArmorSeal Tread Plex" acrylic latex, self-priming. 3 coats required. Color shall be Satin Black.
8. Balco 1120 flush expansion joint at abutment to concrete floor.
9. Rubber Base: Rubber, 4 inches high, 3 inch base, Johnson "Vent-Cove" or approved.

B. [SFF-2] Black Box/Drama Classroom @ High School / Middle School Stage
1. Recessed Slab and Vapor Barrier
2. 4" square x ¾" thick neoprene kinetic pads, 50 durometer rated, 16" x 16" centers.
3. 23/32" T&G Sturdifloor 4x8 plywood as subfloor, with kinetic pads glued to bottom.
4. 30# building paper
5. Pre-glued & fully bonded sandwich of ¾" A/C plywood upper floor with S2S "Signature Series" ¼" tempered hardboard finish floor by Decorative Panels International. Stagger 50% offset from subfloor.
6. Fasteners and adhesives shall be high-bond, fully spread between hardboard and upper plywood.
7. Prep, sand, clean and special paint finish with Sherwin Williams "ArmorSeal Tread Plex" acrylic latex, self-priming. 3 coats required. Color shall be Satin Black.
8. Balco 1120 flush expansion joint at abutment to concrete floor.
9. Rubber Base: Rubber, 4 inches high, 3 inch base, Johnson "Vent-Cove" or approved.

C. [DF-1] Dance Studio Classroom @ High School
1. Recessed Slab and Vapor Barrier
2. Kinetics "RIM / KIP" 2" rollout underfloor suspension system, with 4" square KIP pads on 16" x 16" centers and fiberglas mat body
3. Sub-Floor: (2) layers 19/32" T&G AC Sturdifloor 32/16 span rated for both layers. Provide all sheets from same manufacturer and same lot, fully dried and flat. Install upper subfloor layer with "A" side up .Rotate upper layer 90 deg and offset edges by 50%. Screw down at not greater than 12" centers and within 1" of edges and corners.

4. 30# building paper
5. Finish Floor: ¾” x 3” strips, Grade 1 hardwood (Maple or Oak), non-beveled edges and square ends. Strips shall be unfinished and cut for T&G interlocking. Strips shall be solids, not engineered style. Knots shall be less than ¼” diameter. Surface shall be smooth. Run 90 deg rotated to long axis of upper subfloor panels.
6. Prep, sand, clean and special finish of (3) cured coats of Bona Indoor Wood Oil, low VOC.
7. Balco 1120 flush expansion joint at abutment to concrete floor. Set fully flush.
8. Rubber Base: Rubber, 4 inches high, 3 inch base, Johnson "Vent-Cove" or approved.

09 65 66 Resilient Athletic Flooring

A. Gymnasium Flooring
   1. Rubber flooring is an option for gymnasium flooring in K-5 schools and non-competitive locations only upon District approval. Requires district approval early in the design phase.
   2. Industrial and natural rubber supplemented by raw mineral materials and environmentally-compatible color pigments, lead and heavy metal free.
   3. Examples of acceptable manufacturers: Mondo Flooring, Forbo Marmoleum Sport. (Gerflor is constructed of calendared PVC Sheets. Do not use this product or any others containing PVC or vinyl.)
B. Alternate product: Forbo Marmoleum Sport or approved equal.
   1. Point Elastic (Type P) Flooring System: Combines Forbo Marmoleum Sport and rubber underlay to cushion shocks directly at the point of impact. For lower impact sports. Good for School Gyms, indoor club sports, recreation sports.
   2. Area Elastic Flooring System: Combines Forbo Marmoleum Sport with an area elastic (sprung) floor construction. For higher impact sports.

09-66-00 Terrazzo Flooring

A. Acceptable when budget allows. Prioritize entries and public spaces when budget allows.
B. Traditional and epoxy terrazzo is acceptable.
C. Specify non-slip finish.

09-68-00 Carpeting

A. Carpeting is discouraged in high traffic and general classroom settings. Use polished concrete or resilient flooring wherever possible.
B. Carpet is preferred in offices, libraries, and elementary classroom floor reading areas. Reading area dimensions for kindergarten, first and second grade classrooms: 12’ x 12’ or 12’ x 16’ typical. Locate in far corner of rooms for ease of maintenance.
   1. Install hard rubber reducer around reading area perimeter in K-2 carpet area.
C. Carpet as asbestos encapsulation: Some carpets have been certified by EPA to encapsulate asbestos, such as installation over VAT. If carpet is an appropriate solution, consider in these locations.
   1. Example Product: Tandus Powerbond with Ethos backing.
D. For Entrance floors and mats see: 12-48-13. 20 feet or more length of walk off mat in the direction of travel is desired at public entries.
E. Carpet type:
   1. Standard broadloom carpets are not permitted.
   2. District preference is for carpet tiles in most locations where carpet is installed.
   3. For carpet installation over new concrete slabs, use Milliken carpet tile or similar with ‘Traction Back’ backing system that eliminates the need for sealers, adhesive, and allows the slab to breathe through the carpet rather than trapping moisture.
   4. In areas where young children will be napping or eating on carpet areas (i.e. pre-K) a hybrid resilient carpet may be more appropriate.
   5. If a rolled carpet is used, District prefers hybrid resilient carpets where fibers are fused directly to a non-PVC closed cell cushion backing system. Seams are chemically welded making them impermeable to moisture. These carpets employ high-density construction and low pile heights that are more durable and easier to maintain than standard carpet.
      a. Example Product: Tandus Powerbond with Ethos backing
   6. Materials:
      a. Nylon Yarn: Approved type 6 and 6,6, 100% continuous filament 3-ply nylon yarn, such as Antron Legacy Nylon Fiber, Invista, Universal or Aquafil.
      b. Fiber type - Branded fiber with a modification ratio not to exceed 2.5.
      c. TARR (Texture Appearance Retention Rating): Minimum 3.0 heavy traffic use.
      d. Dye Method: 100% Solution-dyed, or 100% Yarn-dyed or combination of both before tufting, from a single dye lot.
         i. Continuous or Kuster dyeing. Print or piece dyeing, or similar dyeing methods performed after fabrication of the carpet is not acceptable.
      e. Backing: Preferred PVC-free. Minimum, no virgin PVC and fully recyclable.
      f. Static Control: Permanent and without chemical treatment. Static generation below 3.5 kilovolts using AATCC TM 134.
      g. No per-fluorinated chemical (PFC) yard coatings
   7. Attachment:
      a. The District prefers self--adhering/glue-free installation, re-locatable carpet tile. Glued carpet tile is not preferred due to loss of ability to relocate in the future.
      b. In reading corner areas for kindergarten and first grade, double the recommended number of tactiles if tactiles are used, for more durable adhesion. Peel and stick are appropriate as well.
F. Carpet Maintenance: Follow manufacturer’s maintenance and cleaning procedures. This includes but is not limited to commercial cleaning, spot cleaning, and vacuum cleaning for each carpet selected. Indoor Air Quality: I
G. Carpet shall meet or exceed standards as contained in the Carpet and Rug Institute (CRI) consumer information label.
H. Warranty:
   1. Ten year warranty against 10% loss of face fiber.
   2. Ten year warranty against edge raveling, snags, picks, runs, and delamination.
   3. Warranty shall not be prorated, and shall cover all costs related to repairing or replacing the carpet.
   4. Carpet warranted not to generate more than 3.5 KV at 70 degrees F and 20% R.H. for the life of carpet.
   5. Will not mildew.
I. Examples:
   1. Tandus
   2. Interface

3. Miliken with Traction backing for new concrete slab installations.

09-80-00 Acoustical Treatment

A. Acoustical wall panels – submit for District approval.
B. Provide durable, mechanically attached, easily cleaned panels.
C. Acoustic panels below 7’-0” must also be able to serve as tackable surface.

09-91-00 Painting

A. Volunteer, PTA and school organization guidelines:
   1. All projects, including volunteer projects shall meet the requirements of this section.
   2. No volunteers may do any prep work in any area testing positive for Lead per item B below. All prep work in these locations shall be done by a licensed professional following guidelines below or completed by PPS staff.
   3. Volunteer Painting Guide: https://www.pps.net/Page/1832
B. Lead-based paint: Prior to any painting work, test existing surfaces for lead-based paint and follow EPA (Environmental Protection Agency) and OSHA (Occupational Health and Safety).
C. Surface Preparation
   1. Prepare and clean surfaces in compliance with coating manufacturer’s instructions for each substrate condition. Scrape existing paint as required to provide smooth surface free from peeling or bubbling substrates. Fill nail holes, cracks, open joints and other blemishes with sealant, putty or caulking compatible with finish system after priming coat has dried.
   2. Protect all surrounding materials.
D. Building accessories such as signage, grills, electrical plates, hardware, fixtures, etc., shall be removed or masked off before painting.
E. Priming
   1. Prime surfaces in compliance with coating manufacturer’s instructions for each substrate condition and applications. Use stain-blocking primers.
   2. New lap or sheet siding: prime both sides and end cuts. Consider prefinished siding for a superior long-lasting product.
F. Materials
   1. Definition: "Paint" as used herein means coating systems including primers, emulsions, enamels, stains, sealers and fillers, whether used as prime, intermediate or finish coats.
   2. Provide top line, high quality commercial grade paints.
   3. Materials selected for coating systems for each type of surface shall be from a single manufacturer.
      a. Paint to be zero VOC when possible. Review application durability requirements by location with District.
G. Paint Colors
   1. Paint colors to be selected from the current District approved color palette unless matching existing colors. The District would like to reduce the sheer number of paint colors used across the district. The approved pallet includes a variety of timeless neutral colors.
   2. Modernization and new construction will develop new color palettes for District review.
   3. See attachment for District Standard colors.
   4. Accent colors may be used in limited locations as approved by the District. The team shall provide color data to the District to be added to the master paint archive.
   5. District’s project manager, school principals, teachers and staff shall be included in the color selection process from approved color palette.
   6. Provide two complete copies of all submittals.
   7. Paint Mock-ups: Required for larger projects including primary gathering spaces, corridors, and more than one classroom as well as any exterior painting projects.
      a. Brush-out area 5-feet x 5-feet, as selected by the architect or District project manager for each color and gloss level.
      b. 10 l.f of paint color and finish for handrails, trim, and other linear elements of in-place surfaces.
      c. 100 s.f. painted with predominate wall color with primer and finish coats.
      d. Acceptable samples may be incorporated into work.
H. Paint Sheens as defined by Master Painters Institute:
   1. Walls at classrooms and offices: Level 3 (Eggshell) or Level 4 (Low Gloss/Satin).
   2. Walls at corridors, mechanical, electrical, custodial and storage rooms: Level 4 (Low Gloss/Satin).
   3. Walls at kitchens, cafeterias, gymnasiums and restrooms: Level 5 (Semi-gloss).
   4. Wood and metal trim: Level 5 (Semi-gloss).
   5. Ceilings: Level 3 (Eggshell).
I. For wood doors, shop finish required with AWI system 9 due to durability and consistent finish.
J. Inspections
   1. Painting (epoxy and elastomeric) may require special inspections.
   2. Adhesion test required for all substrates.
      a. Test area: 100 square inches.
      b. Place duct tape on fully cured surface area to be tested.
      c. In pencil outline test area.
      d. Wait 5 minutes, and pull tape off.
      e. Failure is determined if greater than 50% of the paint is removed from the test area.
K. Warranty
   1. Contractor warranty one year against alligatoring, blistering, cracking, flaking, peeling, and wrinkling.
   2. Eleven months after substantial completion the contractor and owner’s representative will inspect the project for alligatoring, blistering, cracking, flaking, peeling, and wrinkling. The contractor at no cost to the district will repair such failures before the warranty period expires.

09-91-13 Exterior Painting

A. Cementitious Materials:
   1. Prepare by removing efflorescence, chalk, dirt, grease oils, and by roughing as required to remove glaze.
   2. Determine alkalinity and moisture content of surfaces to be painted.
   3. If surfaces are determined to be sufficiently alkaline to cause blistering and burning of finish paint, neutralize before application of paint.
   4. Do not paint over surfaces where moisture content exceeds manufacturer's printed directions.
B. Exterior woodwork:

1. Painted before: Scrape and clean as required to provide a smooth and paintable surface. Clean surface of oil, dirt, and other substances. Spot prime or fully prime as required to assure long lasting finish product. Apply two coats water base acrylic paint.
2. New, unpainted woodwork: Apply one coat of exterior Wood Primer and two coats of water base acrylic paint.
3. Do not use oil-based paints.

C. Exterior wood doors, windows and frames: Clean surface of oil, dirt, and other substances. Spot prime as needed and apply two coats acrylic semi-gloss.

D. Wood flagpoles: Apply one coat of water-based exterior wood primer and one coat of exterior water based acrylic semi-gloss.

E. Wood decks and steps: Apply one coat of exterior wood primer and one coat of water-based porch and deck paint.

F. New Metal: Exterior metal to be exposed galvanized finish except where required for special aesthetic conditions such as historic contexts. Where field welding or other damage to galvanization occurs, restore damaged surfaces in accordance with ASTM A780, *Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings*, which specifies the use of paints containing zinc dust, zinc-based solders, or sprayed zinc. Where painted exterior metal is to be used, see 09-97-00 High Performance Steel Coatings.

G. Existing painted surfaces including metal doors, railings, grilles, and louvers: Spot prime with rust inhibitive metal primer and two coats of exterior water based acrylic semi-gloss.

H. Pavement Striping: Paint shall comply with industry standard AASHTO M248, Type 3F. Pressure wash pavement surface and blow dry wet areas prior to applying paint. Spray-apply paint with straight edges, true alignment, and uniform wet film thickness of 17 mils with thickness variation not to exceed 2 mils. Form handicap symbols, words, and arrows with templates. Apply parking area striping in 4 inch-wide lines.

09-91-23 Interior Painting

A. Plaster surfaces: Spot prime with latex wall primer and two coats of water-based semi-gloss enamel. If needed to provide complete coverage, apply a third coat of latex semi-gloss enamel.

B. Wood windows, doors, frames and trim painted before: Spot prime with latex primer and two coats of latex semi-gloss enamel.

C. Natural finished woodwork: Apply three coats of acrylic clear gloss. Shop finish to AWI System 9 for doors, AWI system 5 for woodwork.

D. Stained woodwork: Apply one coat of penetrating oil stain and three coats of acrylic clear gloss.

E. Acoustical Ceiling Tile non-rated ceilings:

1. Do not paint new factory finished ceilings.
2. Provide non-bridging acoustic paint to refresh stained existing acoustic tile. Example: ProAcoustical Tile and Ceiling Coating.
3. Two coats of acoustic paint sprayed in opposite directions to fill texture.

F. Metal work existing: Spot primed or painted before: Apply two coats of water-based semi-gloss or VOC compliant high performance semi-gloss urethane coating at high use areas.

G. Metal work galvanized: Clean surface of oil, dirt or other substances. Apply one coat of metal primer and two coats of water-based semi-gloss.

H. Metal work, new: Shop prime and paint when possible. Clean surface of oil, dirt or other substances. Apply one coat of rust inhibiting primer and two coats of water-based semi-gloss or VOC compliant high performance semi-gloss urethane coating at high use areas..

I. Insulated piping: Same as for plaster surfaces.

J. Tack boards: Do not paint factory finished tack boards. If already painted, apply non-bridging acoustic paint when required.

09-96-23 Graffiti Resistant Coatings

Historic: Reference National Park Service, “Preservation Brief 38, Removing Graffiti from Historic Masonry. Martin E. Weaver. 1995

A. Coordinate with Division 04 Masonry

B. The owner encourages submittals and recommendations for anti-graffiti coatings. Provide mock up demonstration at no cost to the district prior to application.

C. Graffiti resistant coatings may be desirable to provide a sacrificial layer that eases graffiti removal. However, it may have deleterious impacts on new or existing brick. These coatings must be reviewed with the District in a project specific manner. Provide product data, samples and application extents for District approval. Demonstrate the visual change between coated and uncoated masonry. Determine if the building has a history of graffiti incidents and whether an alternate removal process would better serve the project. Determine whether the maintenance budget is likely to support required re-applications.

D. Where used, apply to all accessible exterior masonry and concrete.

E. Maximum VOC limit – 1000 g/L

09-96-46 Intumescent Painting

A. Fire Marshal approved fire-resistant coatings where fire protection of exposed construction is required.

09-97-00 High Performance Steel Coatings

A. Touch up shop or prime coats that have been damaged with material of the same type and quality as originally used on the shop coat. Thoroughly remove all rust previous to this priming operation.

B. Prepare substrate and apply coatings in strict adherence with coating manufacturer’s instructions.

C. Exterior Metal: Where painted exterior metal is to be used, use non-galvanized metal.

a. Prepare surface per SSPC SP-03, *Power Tool Cleaning* at welded and abraded areas.

b. Primer: Use zinc-rich primer.

i. Example product: Tnemec Series 394 PerimePrime.

c. Where shop surface prep application of primer is not possible, provide an intermediate coat.

i. Example product: Tnemec Series 27 Typoxy.

d. Finish coat.

i. Example product: Tnemec Series 1029 Enduratone.

D. Interior Metal: All surfaces are to receive three coats of material, primer and two top coats. All exposed interior metal, including but not limited to, door and relite frames, doors, electrical plaster rings, grilles, railings, registers, conduit, pipe, mechanical ducts, structural metal truss connections, etc., in finished room areas are to be painted.

E. Example products include Tnemec.

09-97-13 Corridor Lockers

A. Provide electrostatic applied paint for renewal of existing lockers.

B. New lockers to be factory finished. See 10-51-00.

09-97-23 Concrete and Masonry Coatings

A. Test compatibility with existing.
B. Three coats of low or no VOC material, one prime coat (block filler type at masonry), two top coats, semi-gloss.

ROOM TYPE	FLOORING	WALLS	CEILINGS
General Classrooms	Preferred: Pre K-12: Polished Concrete Pre K-5: Carpet Tile at soft ares Accepted: Linoleum Tile	Gypsum Board (GWB)	Acoustic Ceiling Tile (ACT)
Science Classrooms	Preferred: Polished Concrete Accepted: Linoleum Sheet (chemical resistant with welded seams)	GWB	ACT
Computer Classrooms	Preferred: Polished Concrete Accepted: Linoleum Tile (Static dissipative)	GWB	ACT
Art Classrooms	Preferred: Polished Concrete Accepted: Linoleum Tile/Sheet	GWB	ACT
Extended Learning	Preferred: Polished Concrete Accepted: Linoleum Tile, Carpet Tile	Preferred: Veneer Plaster Accepted: Impact-Resistant GWB	ACT
Corridors	Preferred: Polished Concrete Accepted: Linoleum Tile	Preferred: Veneer Plaster or Wainscot Paneling Accepted: Impact-Resistant GWB	ACT
Library	Carpet Tile	GWB	ACT
Cafeteria/Commons	Preferred: Polished Concrete with stain resistant sealer Accepted: Linoleum Tile	Preferred: Veneer Plaster Accepted: Impact-Resistant GWB	ACT
Kitchen	Preferred: Slip-resistant sheet resilient flooring with welded seams (Such as Altro Reliance 25 or Altro Atlas 40) *Note: Do not use AltroClassic 30 due to difficulty cleaning abrasive surface.*	FRP, Ceramic Tile	ACT (washable)
Gymnasium	Wood	Concrete, CMU, Wall Mats	Open to Structure (OTS)
Toilet Rooms	Preferred: Ceramic Tile Accepted: Polished concrete with stain resistant sealer	Ceramic Tile Veneer Plaster Impact-Resistant GWB	GWB
Locker Rooms	Preferred: Polished Concrete Accepted: Ceramic Tile	Concrete, CMU Veneer Plaster Impact-Resistant GWB	GWB
Offices	Carpet Tile	GWB	ACT
Custodial Closets	Concrete	FRP wainscot behind and adjacent to mop sink	OTS, GWB
Mechanical/Electrical Rooms	Concrete	Concrete, CMU, GWB	OTS
Technology Rooms/Closets	Preferred: Concrete, or Resilient Flooring (Static dissipative)	Plywood, GWB	OTS
Audtitorium	Polished Concrete (under seats) Carpet (in aisles)	TBD	TBD
HS Main Stage	Wood	GWB, painted black	OTS
HS Black Box	Wood	GWB, painted black	Pipe Grid
HS Dance Studio	Wood	Impact-Resistant GWB	OTS, ACT
HS Band	Preferred: Polished Concrete Accepted: Linoleum Tile, Carpet Tile	GWB	ACT Clouds
HS Choir	Preferred: Polished Concrete Accepted: Linoleum Tile, Carpet Tile	GWB	ACT Clouds
HS Weight Room	Rubber Athletic Flooring	Impact-Resistant GWB	OTS, ACT
HS Wrestling	Rubber Athletic Flooring	Impact-Resistant GWB, Wall Mats	OTS, ACT