BEAVERTON SCHOOL DISTRICT

BSD Technical Standard
Division 9: Paint & Finishes

1. PURPOSE

This technical standard is a narrative describing Beaverton School District's (BSD's) Basis of Design for paint and finishes. The information contained herein shall be used by the Project Design Team to help BSD create an aesthetically pleasing environment that is conducive to learning, promotes health and safety, is economical, easy to maintain, and helps BSD meet its goals for sustainability. This technical standard shall be used as part of BSD's General Design Standards (comprised of the BSD Educational Specifications and BSD Technical Standards).

2. GENERAL

2.1. COMMON WORK RESULTS

2.1.1. Design shall provide paint and finishes that will deliver a durable, low maintenance, easy to clean, and visually and acoustically pleasing educational environment. Wainscot is preferred in corridors and high traffic areas.

2.1.2. Provide surfaces for display of student work in corridors for all elementary schools and in other schools, as required.

2.1.3. Sound transmission and acoustics are very important in an educational environment. Sharp sounds, loud noises, and excessive use of acoustically reflective surfaces can be detrimental to learning. Design to limit transmission of sound between spaces paying particular attention to mechanical equipment and equipment rooms, conference rooms, performance spaces, band, and music rooms.

2.1.4. The design shall incorporate the use of materials that will withstand or be easily repaired after being subjected to the type of forces and/or abuse that may occur in a school environment. This shall include providing adequate backing for all wall- or ceiling-mounted fixtures, devices, and equipment.

2.1.5. Limit the use of suspended ceilings in high schools and middle schools to areas with a ceiling height of 10'-0" or greater. Select finishes that will be resistant to graffiti and allow for easy removal when it occurs.

2.1.6. Construction techniques that require caulking to prevent water infiltration shall be avoided, if possible.

2.2. BSD STANDARD FINISHES

2.2.1. **The use of asbestos, in any form, on BSD projects is expressly prohibited.**

2.2.2. To address energy use by minimizing interior lighting power requirements and enhance contributions from natural daylight, light-colored highly reflective finishes shall be used on all

ceilings. Light-colored finishes shall be used for field finishes on walls and darker colors may be used for accent.

2.2.3.BSD Standard Room Finishes Schedule

Room Type	Flooring	Walls		Ceilings	
		Material	**Sheen**	**Material**	**Sheen**
Classrooms	Vinyl Tile (VCT), Polished Concrete, or Carpet	Gypsum Board (gyp board)	Low Gloss Egg Shell	Acoustic Ceiling Tile (ACT) Armstrong School Zone Fine Fissured 1714[1]	N/A
Offices	VCT, Polished Concrete, or Carpet	Gypsum Board	Low Gloss	ACT Armstrong School Zone Fine Fissured 1714	N/A
Corridors	VCT, or Polished Concrete	Gypsum Board Wainscot	Low Gloss	ACT Armstrong School Zone Fine Fissured 1714	N/A
Kitchen	Slip Resistant Sheet Vinyl	Green Board as req'd by code, mold- resistant surrounding water sources	Semi-Gloss	ACT Armstrong 870B Green Board when required by code	N/A
Cafeteria	VCT, or Polished Concrete	Gypsum Board	Semi-Gloss	ACT Armstrong School Zone Fine Fissured 1714	N/A
Student Restrooms	Unglazed Ceramic Tile	Glazed Ceramic Tile Wainscot to 5' height, Green board/mold resistant gyp board	Semi-gloss	Gypsum Board	Low Gloss
Adult Restrooms	Sheet Vinyl	FRP wainscot around water sources; Green board/mold resistant gyp board	Semi-Gloss	Gypsum Board	Low Gloss
Custodial Closets	Concrete	FRP Wainscot behind and adjacent to mop sink	Low Gloss	Gypsum Board	Low Gloss
Mechanical Rooms	Concrete	Gypsum Board or Structural Block	N/A	Open if Sprinklered	N/A

[1] See List of Brand Name Products as approved via School Board Resolution 14-409 in accordance with ORS 279C.345.

2.3. DESIGN DOCUMENTS

2.3.1. Drawings shall contain all finish schedules. The Project Design Team shall review paint and finish designs with District personnel at the completion of Schematic Design, Design Development, and at 80% Construction Documents.

2.4. SUBMITTALS

2.4.1. Provide manufacturer's data sheets on each product to be used, including:

2.4.2. Preparation instructions and recommendations

2.4.3. Storage and handling requirements and recommendations

2.4.4. Installation methods

2.4.5. Submit finish schedule including color information, gloss, and model number for each type, and color of finish specified.

2.4.6. Provide two Verification Samples for each finish product specified, minimum size 6" square, representing actual product, color, sheen, and patterns.

2.5. CONSTRUCTION INSPECTIONS

2.5.1. Contractor shall provide start date for painting in the Three-Week Look-Ahead Construction Schedule. Contractor shall provide notice to the BSD Representative at least 24 hours prior to beginning to apply paint.

2.5.2. If painting is being done in stages, similar schedule, and notification will be required for start of each stage. Notification shall allow Owner to inspect wall substrates prior to any primer being applied and to allow additional inspections between primer and finish coats.

2.6. SAFETY

2.6.1. Contractor shall take special safety precautions against hazards from toxic and flammable materials. Keep open flame, electrical, and static spark, and other ignition sources away from flammable vapors and materials at all times.

2.6.2. Place paint and solvent contaminated cloths and materials subject to spontaneous combustion in sealed non-flammable containers and remove from job site each day.

2.7. EXTRA MATERIALS

2.7.1. Verify all extra materials requirements with BSD Representative. In general, provide extra materials in full, unopened manufacturer's cartons (or containers) for storage at the school. The extra materials shall be from the same manufacturing lot as those installed during construction. At project closeout, provide to the Owner or Owner's Representative :

2.7.1.1. One gallon of each finish coating material, including brick sealer, and graffiti coatings, in sealed, unopened original manufacturer's container. Clearly mark with color and finish identification. Remove all other opened containers and dispose of in compliance with all State and Federal regulations and guidelines

2.7.1.2. Ceiling tiles and flooring tiles: Provide a quantity for each unique type (or color) equal to 5% of amount installed, including grout for ceramic tile applications. The minimum quantity for ceiling and floor tiles is one full, unopened carton

2.7.1.3. Rolled flooring materials: one 12’ x 12’ piece

2.7.1.4. For all other materials including specialty items, consult BSD Representative.

2.8. TRAINING

2.8.1. Building Operators

2.8.1.1. Operational and safety training shall be attended by building personnel and maintenance staff. Provide training that emphasizes daily maintenance requirements, cleaning and safety procedures. Training for maintenance shall cover specialized material handling requirements including concerns during application, cleaning, disposal, and safety concerns.

2.8.2. Maintenance

2.8.2.1. Maintenance training shall provide a minimum of the following: Review of complete O&M manuals, including but not limited to, Material Safety Data Sheets (MSDS), required maintenance and troubleshooting, and must include contact names and phone numbers for factory support.

3. WALL FINISHES, DRYWALL, AND COVERINGS

3.1. SEPARATION WALLS

3.1.1. Provide separation walls as required by building code. All penetrations in separation walls shall be sealed with an approved fire stopping material.

3.1.2. All fire stopping shall be of a single type and from the same manufacturer. In existing facilities, identify and match the existing fire stopping material.

3.2. BLOCKING (SEE DIVISION 6)

3.3. FRAMING AND SUPPORT (FOR PLASTER AND GYPSUM BOARD)

3.3.1. Metal studs are preferred, 18-gauge minimum. Wood studs, when used, shall be spaced at 16” on center.

3.3.2. See BSD Technical Standard Division 6: Carpentry and Casework for additional wood framing requirements.

4. INTERIOR WALLS

4.1. GENERAL

4.1.1. Use durable, long lasting materials that are easy to clean and maintain. Consider both durability and appearance in public areas. Provide wear-resistant wainscots in traffic areas.

4.2. PLASTER, LATH AND GYPSUM BOARD

4.2.1. Patching Materials and Surfaces

4.2.1.1. In buildings requiring remodeling, patched materials, and surfaces must be finished so that existing and new materials match one another, not only in color, but also in patterns and surface texture. The intent is not to have a patched appearance.

4.2.1.2. In areas where partitions must be removed to create new areas, careful planning is required to ensure that finishes of the existing and the newly created surfaces are

homogeneous. The existing materials should blend into the new so that the transitions from one material to the other cannot be readily observed. If the desired level of finish cannot be achieved, arrange contrasting materials in a pleasing design.

4.2.2. Lath and plaster shall not be used for new construction. These materials may **only** be used for patching existing plastered surfaces.

4.2.3. The use of plaster for ceilings and of stucco for exterior finish, including canopy soffits, is prohibited.

4.3. DRYWALL

4.3.1. Provide the following number of coats of drywall mud finish to fill and cover all joints, angles, fasteners, and accessories in the listed room type. Provide the listed Surface Level as specified by Gypsum Association in GA-214-07 and GA-214-9M-97:

Three coats:	Mechanical, electrical rooms, custodial closets, and storage rooms; exceeds Surface Level #3
Four coats:	Classrooms; exceeds Surface Level #4
Five coats:	Corridors, gymnasiums, locker rooms, cafeteria, offices, high traffic / public areas; exceeds Surface Level #4

4.4. MOIST AND WET LOCATIONS

4.4.1. Use mold and water-resistant drywall as required by code extending 4' around water sources on both sides of the wall assembly.

4.4.2. Provide visqueen (minimum: 4 mil) vapor barrier behind the drywall at shower walls, mop sinks, dishwashing rooms, and exterior walls of walk-in coolers and freezers**.**

4.4.3. Use stainless steel wall finish at mop sinks. See Figure D9.1.

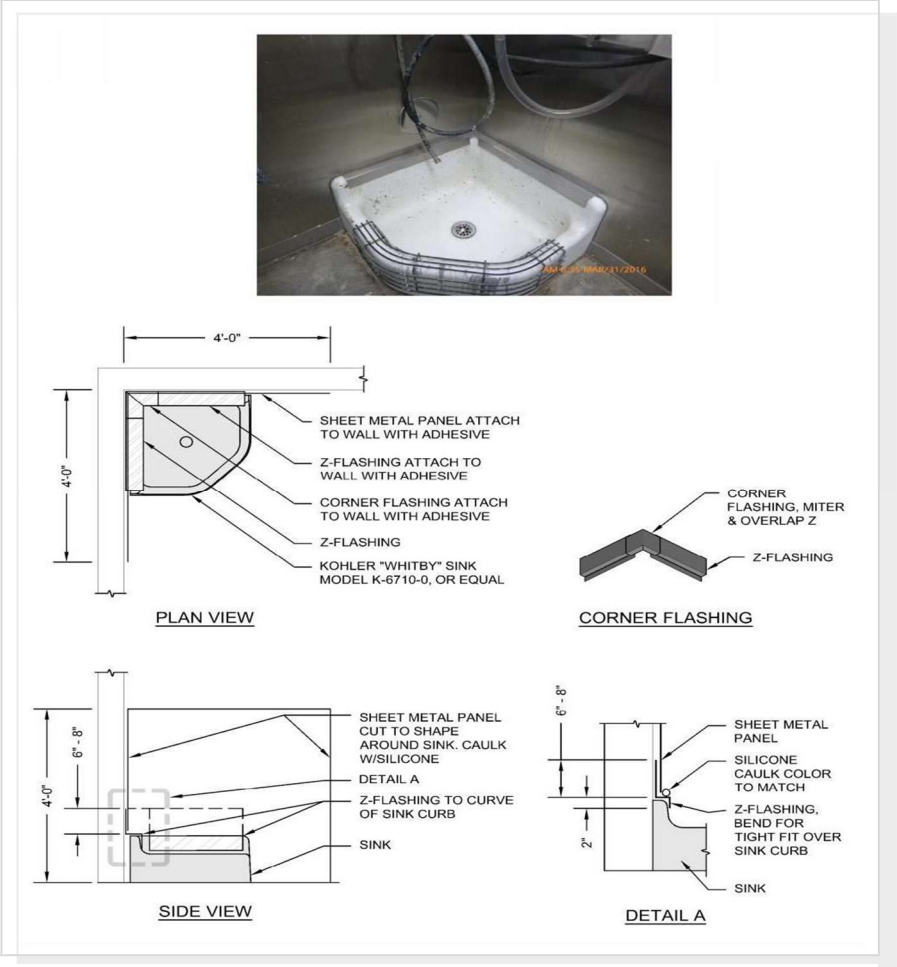


Figure D9.1: Mop Sinks

4.5. FULL LENGTH REVEALS

4.5.1. Full length reveals are preferred. Provide control joints at each door or relite jamb and extend control joint from head to ceiling and from window sill to floor.

4.6. CORNER BEADS

4.6.1. Metal break beads shall be used around all door and window installations. Use casing beads at exposed edges of plaster and drywall and corner beads with 1¼" minimum width flange at outside corners.

4.7. CORNER PROTECTION

4.7.1. Provide metal corner protectors on all “outside” corners in traffic areas. Corner protectors must be mechanically fastened using counter-sunk screws to all pre-finished paneling and sheet rock corners. Provide eased edge to avoid injury to students.

4.7.2. Corner protectors shall be stainless steel, or aluminum, to a minimum height of 4’-0”. In kitchens and service/delivery areas, minimum height of 6’ (maximum 8’-0”). Plastic is unacceptable.

4.8. WAINSCOT

4.8.1. Wainscot constructed from pre-finished and easily cleaned materials is required for all corridors. Provide metal protection at all corners.

4.8.2. Use abrasion and impact-resistant panels for wainscot.

4.8.3. Acceptable materials include Masonite or hardboard. Plastic laminated (Formica) panels, if used, shall be fabricated off-site, and shall be installed with edges butted and mechanically fastened to the wall with screws. FRP panels are only acceptable in service areas.

4.8.4. Panels shall be installed to a minimum height of 4 feet in hallways. Service corridors shall have panels installed to a minimum height of 5 feet.

4.9. CERAMIC TILE

4.9.1. Ceramic tile shall be used in all public and student rest rooms for both the floors and as a wainscot to a height of 5 feet.

4.9.2. Glazed ceramic tile is required for wet walls in restrooms. Use of ceramic tile on other wet walls requires approval. Use smooth, glazed, standard commercial grade tile equal to Dal-tile® with colors selected from group 1 or group 2. Preferred tile size is 4¼"by 4¼".

4.9.3. Wall tile shall be installed over cement-fiber or expanded shale board, Wonderboard®, or equal, with 1/2" thickness.

4.9.4. Set tile in full mortar bed. Adhesive may be used in areas of limited moisture exposure with approval of BSD Representative.

4.9.5. White grout is prohibited. Use Epoxy grout for ceramic floor tiles.

4.9.6. Provide final cleaning per manufacturer's recommendations, leaving no surface residue.

4.9.7. Contractor shall have a minimum of five years commercial ceramic tile installation experience.

4.10. WALL FINISHES AND COVERINGS

4.10.1. Use of wall coverings is discouraged. Wallpaper is not allowed. Class A wall covering may be used on walls for sound deadening (e.g., quiet rooms).

4.11. TACK BOARDS AND MARKER BOARDS

4.11.1. General

4.11.1.1. Provide dry erase marker boards and tackable wall panels throughout the instructional areas, as required.

4.11.1.2. Marker boards and tackable wall panels shall be mechanically fastened to the wall with screws.

4.11.2. Tack Board

4.11.2.1. Provide tackable panels for display of student work in classrooms, elementary school corridors, and at other schools, as required.

4.11.2.2. Edge wrap the material on all tack panels. Protect all exposed edges by framing the tack board with clear, satin anodized, aluminum molding.

4.11.3. Marker Boards

4.11.3.1. Provide dry marker boards in classrooms, offices, conference rooms, computer rooms, and other spaces, as required.

4.11.3.2. Marker boards shall be prefabricated from enamel steel and be provided with continuous display rail, cork insert at the top, and a continuous chalk tray at the bottom (except in gyms and activity rooms). Flag holder is optional.

4.11.3.3. Protect all exposed edges by framing the tack board with clear, satin anodized, aluminum molding.

4.11.3.4. Verify marker board mounting heights by type of space and grade level.

4.12.TOILET PARTITIONS (REST ROOMS)

4.12.1. Provide blocking in restroom walls for mounting of washroom accessories.

4.12.2. Provide a stainless-steel framed mirror; most other toilet and bath accessories to be provided by the District.

4.12.3. All toilet stalls to have doors. Toilet partitions and doors to be metal or hard plastic which cannot be marred/gouged; material to be determined on a project-by-project basis.

4.12.4. Restrooms, toilet stalls, and accessories must be designed and installed to meet Americans with Disabilities Act (ADA) requirements appropriate for the age group being served.

5. EXTERIOR WALLS

5.1. STRUCTURE PROTRUSIONS

5.1.1.Design exterior surfaces to discourage climbing and bird nesting. Minimize crevices, ledges, and protrusions that could be used as toeholds for climbing or spaces that could be used by nesting birds.

5.2. SIDING AND FINISHES

5.2.1.Exterior Insulation Finishing System (EIFS), Dryvit or similar synthetic stucco systems are not acceptable for new buildings, additions or remodels. However, it is permissible for existing stucco systems to be repaired or replaced with like products.

5.2.2.Metal siding shall only be used above 8’-0” on school buildings. This restriction does not apply to outbuildings. Corrugated metal siding shall be installed vertically. Metal siding shall be factory finished with Kynar 500 fluorocarbon coating or equal.

5.2.3.Avoid details that are dependent on caulking for resistance to water infiltration.

5.2.4.Select materials that allow for easy removal of graffiti.

6. CEILINGS

6.1. T-BAR

6.1.1.New construction: Use 1” white T-bar on 2’ by 4’ grid seismically braced to IBC standards.

6.1.2.Existing buildings: Re-use existing grid unless code requires replacement.

6.2. CEILING TILES

6.2.1. The standard style of ceiling tile for suspended ceilings is 2’ by 4’ Armstrong School Zone Fine Fissured 1714. For kitchens, use Armstrong 870B. Use of 2’ by 2’ ceiling tiles should be limited and requires approval from BSD Representative. If 2x2 approved, use Armstrong 1734A (2x2) or Armstrong 2767D (2x4 with 2x2 appearance). Interlocking 12” by 12” ceiling tiles are not acceptable.

6.3. ACOUSTICAL CEILINGS

6.3.1. Direct applied acoustical ceilings shall only be used in areas with existing direct applied acoustical ceilings and shall be applied to match existing finish.

6.4. HARD LIDS

6.4.1. Hard lids are required in restrooms, storage rooms, moist locations (other than kitchens), and safe rooms.

7. FLOORING

7.1. GENERAL

7.1.1. Contractor shall have five years of commercial flooring and/or floor covering installation experience that is relevant to the products being installed.

7.1.2. Flooring and floor covering products shall be durable long lasting, easily cleaned, low maintenance products with a history of successful use in K-12 educational environments. Epoxy floors are prohibited.

7.1.3. If products other than those listed as acceptable for use in this Technical Standard are proposed for any application, the Design consultant shall provide a cost benefit analysis. The cost benefit analysis shall be based on the expected life of the products, the installed cost of the products being compared, warranty benefits, and maintenance requirements. Cost comparison must include the cost of any special equipment required for product maintenance and factor in the impact that installation and curing times have on construction schedules.

7.1.4. Prior to installation of any flooring or floor covering product, ensure that the subfloor, or substrate to receive the covering, has been properly prepared to meet all manufacturers’ recommendations.

7.1.5. Prior to installation, ensure that temperatures and moisture content are within manufacturer’s recommendations. Acclimatize flooring products and adhesives to the space’s current temperature for 48 hours, or manufacturer’s recommendation, whichever is longer.

7.1.6. Evaluate substrate material and condition, as well as locations where new product meets existing finishes and correct all deficiencies. **Gypsum floor fill is not acceptable**. The surface must be smooth, rigid, flat, level, permanently dry, clean, and free of all foreign material such as dust, paint, grease, oils, solvents, curing and hardening compounds, sealers, bond breakers, asphalt, and old adhesive residue.

7.1.7. Rubber tiles are required where any resilient flooring product crosses an expansion joint.

7.1.8. Non-slip flooring products are required in all kitchen areas. Restrooms and moist, or wet, areas typically require ceramic tile with an epoxy grout. However, sheet vinyl is acceptable in staff restrooms (non-student use) and health restrooms.

7.1.9. Refer to the **BSD Standard Room Finishes Schedule** at the beginning of this Technical Standard for general requirements.

8. SPECIFIC PRODUCTS

8.1. CERAMIC TILE

8.1.1. **Unglazed** tile is required for ceramic tile floors. Use of other flooring products on restroom floors requires approval from BSD Representative.

8.1.1.1. Use smooth, unglazed, standard commercial grade tile equal to Dal-tile® with colors selected from group 1 or group 2.

8.1.1.2. Preferred tile size is 2" by 2".

8.1.1.3. Tiled floor surfaces shall be sloped to drain with a minimum slope of 1/8" per foot, maximum 1/4" per foot.

8.1.1.4. Ceramic floor tile installed in wet areas, including toilet rooms, showers, and dishwashing areas, shall be set in full mortar bed or thinset method based on existing conditions.

8.1.1.5. Use Epoxy grout for ceramic floor tiles. White grout is prohibited. Provide final cleaning per manufacturer's recommendations, leaving tile without surface residue.

8.1.2. Resilient Flooring Products

8.1.2.1. Substrate conditions and preparation are critical when using resilient flooring products. Evaluate substrate material and condition, as well as locations where new product meets existing finishes and correct all deficiencies. **Gypsum floor fill is not acceptable**.

8.1.2.2. The surface must be smooth, rigid, flat, level, permanently dry, clean, and free of all foreign material such as dust, paint, grease, oils, solvents, curing, and hardening compounds, sealers, bond breakers, asphalt, and old adhesive residue.

8.1.2.3. Contractor shall provide final wax finish to all resilient flooring products. Use wax product specified by BSD Custodial Services. Apply six coats in corridors and three coats in classrooms at manufacturer's recommended application rate unless directed otherwise by BSD Representative (product currently used by BSD Custodial Services is Diamond Floor Finish manufactured by Corporate Express, applied at a rate of 2500 square feet per gallon for each coat.).

8.1.3. Transition/Reducer Strips

8.1.3.1. Transition/reducer strips shall be non-ferrous metal, mechanically fastened for durability.

8.1.4. Vinyl Composition Tile and/or Polished Concrete

8.1.4.1. Use of polished concrete or VCT (rather than carpet) in classrooms and offices shall be determined on a project specific basis. As a minimum, typical classrooms have polished concrete or VCT in front of sinks and cubbies and at entry.

8.1.4.2. Tile Size: 12” by 12” by 1/8”

8.1.4.3. Products: Mannington®: Essentials; Armstrong®: Standard Excelon; Azrock®: Cortina Colors and Classics

8.1.4.4. Expansion Joints: Use 1/8” thick, Flexco or Johnsonite rubber tile (smooth finish in gyms).

8.1.4.5. Select colors to match adjacent tile patterns.

8.2. SHEET VINYL

8.2.1.General

8.2.1.1. Use sheet vinyl for conditions that preclude polished concrete or VCT such as suspended wood substrates and wet areas.

8.2.1.2. Heat weld all seams. Install so that seams are not located in traffic areas, around drains, or other areas that may be exposed to moisture.

8.2.1.3. If locking drain rings are not present, set vinyl in 4” wide band of two-part adhesive at drain.

8.2.1.4. Provide a minimum of 4” high, dark-colored, rubber cove base. Staff and health restrooms require 6” high, rubber cove base.

8.2.1.5. Seal with silicon behind the base where the flooring meets the wall and at bottom and top edges of the cove base.

8.2.2.Staff and Health Room Restrooms

8.2.2.1. Commercial Sheet Vinyl: Heterogeneous backed, 6’ wide

8.2.2.2. Products: Armstrong®: Connection Corlon (basic grade); Mannington®: Fine Fields (upgrade); Armstrong®: Possibilities (upgrade)

8.2.3.Kitchens

8.2.3.1. Kitchen flooring materials and surfaces must be moisture-, mold-, and humidity-resistant, closed cell, non-porous, food service-rated products that can be easily cleaned.

8.2.3.2. Seams shall be avoided.

8.2.3.3. Food service rated sealers and coatings are required.

8.2.3.4. Non-slip flooring is required in all kitchen areas.

8.3. LINOLEUM (MARMOLEUM) TILE AND SHEET GOODS

8.3.1.General

8.3.1.1. Linoleum (Marmoleum) tile and sheet shall not be used in restrooms or other areas regularly subjected to moisture. Other than in areas subjected to moisture, Linoleum can generally be used in similar locations to sheet vinyl, polished concrete, and VCT. The product is available as both sheet and tile.

8.3.1.2. Linoleum products have different care requirements than vinyl-based products (i.e., the final finish wax for Marmoleum requires fewer coats than other resilient flooring products and should be applied per manufacturer’s recommendations). Ensure that the

Linoleum products being specified will be compatible with the cleaning, stripping, and finishing products used by the District. Provide training to ensure that the product care will be per flooring manufacturer's recommendations.

8.4. RUBBER TILE, COVE, AND SHEET PRODUCTS

8.4.1. General

8.4.1.1. Provide material from one manufacturing batch only. Use stringers, nosings, trim, and cove supplied by same manufacturer.

8.4.1.2. Consider substrate, durability, features, and moisture or heat source conditions for specific location.

8.4.2.Rubber Wall Base

8.4.2.1. Use dark colors only

8.4.2.2. Minimum height of 4"; Height of 6" required in restrooms

8.4.2.3. Pre-molded corners are not allowed

8.4.2.4. Products: Flexco®; Roppe; Johnsonite®

8.4.3.Stair Tread

8.4.3.1. Product: Nora Systems, Flexco®, Johnsonite®, Roppe

8.4.3.2. Raised round profile rubber treads with smooth riser

8.4.4.Rubber Tile

8.4.4.1. Expansion Joints: Use 1/8" thick, Flexco ® or Johnsonite® rubber tile or sheet (smooth finish in gyms).

8.4.4.2. Select colors to match adjacent tile patterns

8.4.4.3. Products: Flexco® Evolving Styles, Creative Elements Johnsonite® C xx Smooth x 1/8"

8.5. CARPET

8.5.1.General

8.5.1.1. Use of carpet (instead of polished concrete or VCT) in classrooms and offices shall be determined on a project specific basis. Premium fiber yarn systems only.

8.5.1.2. Product: Invista or Dura Color by Lees, or equal, with lifetime warranty and stain resistance.

8.5.1.3. Entry mats are required at all main entrances and entrances from play areas.

8.5.1.4. Typically, carpeted classrooms also have polished concrete or VCT in front of sinks and cubbies, and at entry.

8.5.1.5. Seams shall be perpendicular to windows in classrooms. Pattern repeat is not acceptable. **Note**: Inspect rolls prior to cutting. Flaws and imperfections are not acceptable.

8.5.2.Transition/reducer strips shall be non-ferrous metal, mechanically fastened for durability.

8.5.2.1. Construction: Tufted Broadloom

8.5.2.2. Face Weight: 22 oz., minimum

8.5.2.3. Carpet Backing: Integra HP, installed with Mannington Integra adhesive or equal

8.5.2.4. Size: 12’ width

8.5.2.5. Product: Lees Commercial or equal

8.5.2.6. Patterns: Groundwork, Heartland

8.5.2.7. Warranty: Lifetime per manufacturer feature list, plus stain resistance; signed per project by representative

8.5.3.Carpet Tile

8.5.3.1. Product: Carpet tiles shall be 324 sq inches or greater. Tiles less than 324 sq inches will require approval by BSD Representative.

8.5.3.2. Manufacturers: Mohawk, Lees, Mannington®; Interface®, or equal,

8.5.3.3. Warranty: Lifetime plus stain resistance

8.5.4.Entry Mat

8.5.4.1. Minimum size of 9’ by full width of entry. For portables, provide 3’ by 5’ entry mat at exterior doors.

8.5.4.2. Synthetic Roll Flooring Entry Mat (Indoor/Outdoor)

8.5.4.2.1. Product: Connexus, or equal

8.5.4.2.2. Pattern: Super NOP 52

8.5.4.2.3. Texture: Hobnail

8.5.4.2.4. Width: 13’-2” and 6’-7” by 0.50” Total Height

8.5.4.2.5. Construction: Non-woven, needle punched, 100% ASOTA Polypropylene Solution Dyed Fiber

8.5.4.2.6. Backing: Natural/Synthetic Composite Rubber

8.5.4.3. Synthetic Tile Entry Mat (Indoor Only)

8.5.4.3.1. Product: Lees First Step, StepUp, or Mannington Recoarse/Traverse, or equal

8.5.4.3.2. Warranty: Lifetime warranty and stain resistance, 100% nylon fiber

8.5.5.Wood Flooring

8.5.5.1. Middle school and high school stages shall have paintable wood floors

8.5.6.Hardwood Floors

8.5.6.1. Suspended Hardwood (3/4” Maple Flooring Manufacturer’s Association (MFMA) Grade #1 Random Length Northern Hard Maple)

8.5.6.2. Floors shall be used for middle school and high school gyms

8.6. ACOUSTICS

8.6.1.General

8.6.1.1. Floor plan and building and site layout should separate or isolate areas with noise generating activities and equipment. When offices, counseling offices, or instructional spaces have shared walls with restrooms, kitchens, locker rooms, or other noise producing rooms (e.g., music rooms and gyms) provide design that limits sound transmitted between the spaces.

8.6.1.2. Design shall incorporate vibration control for mechanical equipment, motors, and transformers. Equipment must not telegraph vibration and noise through structural members.

8.6.1.3. Select location and method of installation of hand dryers in restrooms to minimize sound transmission to classrooms.

8.6.1.4. Emergency generators shall be located and designed to minimize impact from noise, vibration, and exhaust emissions on school activities.

8.6.1.5. Acoustic performance shall be incorporated into the design to provide an environment that is conducive to learning. This should be accomplished through evaluation and selection of appropriate finishes and materials. Pay particular attention to sound transmission and reverberation times in classrooms and in spaces that may be used for assemblies or the performing arts. Design shall provide reverberation time appropriate for activity and volume of each space.

8.6.1.6. Provide acoustic insulation for offices, counseling offices, restrooms, locker rooms, and other noise producing rooms (e.g., music and gyms) abutting instructional spaces.

8.7. PAINT MATERIALS

8.7.1.General

8.7.1.1. Provide materials to meet all local Air Quality Regulations.

8.7.1.2. Acceptable manufacturers: Rodda Paint, Miller Paint, Sherwin Williams, Kelly Moore, and special coatings as approved by the BSD Representative.

8.7.2.Minimum Quality of Finishes for Selected Substrates

1. Re-paint:	Paint applied over existing painted finish in good condition.
2. Primer:	One coat of type recommended by coating manufacturer for maximum coating adhesion.
3. Finish:	Sheen and material as appropriate for space. Doors and other areas requirement semi-gloss finish shall be 100% acrylic
4. Drywall:	Select finish according to use of space. Minimum acceptable finish is one coat of heavy bodied Acrylic wall board sealer as primer and two coast Interior Latex sheen per Finish Schedule.
5. Drywall and Plaster:	PVA primer
6. New Concrete, Interior:	Primer: One coat high quality, acrylic latex primer Finish: 100% Acrylic low gloss, two coats

7. New Concrete, Exterior:	Primer: Appropriate for pH factor Finish: Elastomeric, two coats
8. Stucco, Existing (no new stucco allowed):	Primer: One coat, high quality acrylic latex primer Finish: Elastomeric, two coats
9. Gypsum Wallboard, Interior:	Primer: PVA Finish: Acrylic latex, Rodda Paint Lasyn, or equal
10. Interior Ferrous Metals (e.g., restrooms, team rooms, locker rooms):	Primer: Red Oxide, "Alkyd" Finish: Industrial Enamel, two coats
11. Exterior Ferrous Metal (Bare, to be approved by BSD Representative, excluding handrails):	Primer: Oil base primer Finish: Tnemec 2-part epoxy
12. Exterior Ferrous Metal (Handrails):	Galvanized
13. Hollow Metal, pre-primed (e.g., doors, frames):	Finish: Exterior: Industrial Enamel, two coats / Interior: Two coats, Rodda Paint Multi Master DTM, or equal
14. Non-ferrous Metal:	Primer: Vinyl wash primer Finish: Industrial enamel, two coats
15. Cedar Siding (Bare):	Primer: Alkyd stain block primer Finish: Two coats, Rodda Paint AC-911, or equal
16. T-1-II Siding (not for use in new construction):	Primer: First coat, acrylic Finish: Two coats, Rodda Paint AC-911, or equal Raw panels should be primed to include edges and 3" on back side perimeter.
17. Wood (e.g., trim, gable):	Primer: First coat, acrylic Finish: Two coats, 100% Acrylic, Rodda Paint AC-911, or equal
18. Hardi Board, Lap Siding:	Primer: Acrylic Finish: Two coats, Rodda Paint AC-911, AC-909, or better
19. Sealants, Split Face, CMU, Brick:	Graffiti Coatings: Prosoco, Protectosil, or approved equal Brick Seal: Prosoco, Siloxane WB, or better **Note:** Follow all manufacturer's specifications for application

8.8. SPECIAL COATINGS

8.8.1. Water Repellant Coatings

8.8.1.1. Contractor shall notify BSD Representative prior to applying sealant. Test compatibility with existing coatings prior to application. District shall provide an inspector/observer to be on-site during application.

8.8.1.2. The weatherproofing, graffiti sealants, and joint sealant products listed below have proved to be durable and to reliably meet the District's needs. However, the District encourages input from the Designer and, to bring to the District's attention, any superior products that are developed for these purposes and any products of equal performance

and that are more cost effective. Provide mock up demonstration at no cost to the District prior to inclusion into specifications.

8.8.2. Weatherproofing

8.8.2.1. Sure Klean Weather Seal Blok-Guard by Prosoco, or approved equal.

8.8.3. Graffiti Sealant

8.8.3.1. Evonik Protectosil, or approved equal. Apply full strength to lower 10’-0” of wall surface as anti-graffiti sealant. Above 10’-0”, apply at 15:1 mix for brick sealing.

8.8.4. Joint Sealants

8.8.4.1. Paintable Surfaces: Vulkem 921, Sika Flex 1A, or approved equal. Install with proper backer rod.

8.8.4.2. Non-Paintable Surfaces: GE 795, or approved equal

8.9. CLOSEOUT AND AS-BUILTS

8.9.1. At project closeout, provide to the Owner’s Representative, one gallon of each finish coating material, including brick sealer and graffiti coatings, in sealed one-gallon containers, clearly marked with color and finish identification. Remove all other opened containers and dispose of in compliance with all State and Federal regulations and guidelines.

8.9.2. Contractor shall provide an As-Built Finish Schedule. Update Finish Schedule to include a list of product number, formula and location for each finish used. If Custom Finishes are used, include product number and color formula.

8.10. QUALITY ASSURANCE

8.10.1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

8.10.2. Coordinate work with other operations and installation of finish materials to avoid damage to installed materials. Do not apply coating materials until moisture or dust-producing work, or other appearance or performance impairing construction activities, have been completed. Post "WET PAINT" signs during application and curing of all coatings that may be accessed by other trades or the public.

8.10.3. Repair coatings, damaged by subsequent construction activities, to achieve flat, uniform surface without surface defects visible from 5’. Where repairs cannot be made to Architect's acceptance, re-apply finish coating to nearest adjacent change of surface plane, in both horizontal and vertical directions.

8.11. SAFETY AND HANDLING

8.11.1. Provide manufacturer's data sheets on each product to be used, including:

8.11.1.1. Preparation instructions and recommendations

8.11.1.2. Storage and handling requirements and recommendations

8.11.1.3. Installation methods

Revision History

Rev 1: 12/23/16

Section	Section Title	Revision
III.	BSD STANDARD FINISHES; BSD Standard Room Finishes Schedule	Classrooms-Polished Concrete-ACT Armstrong School Zone Fine Fissured 1714 Offices-Polished Concrete- ACT Armstrong School Zone Fine Fissured 1714 Corridors-Polished Concrete- ACT Armstrong School Zone Fine Fissured 1714 Cafeteria-Polished Concrete- ACT Armstrong School Zone Fine Fissured 1714
IX.A.	STRUCTURE PROTRUSIONS	Design exterior surfaces to discourage climbing and bird nesting. Minimize crevices, ledges, and protrusions that could be used as toeholds for climbing or spaces that could be used by nesting birds. ~~Select materials that allow for easy removal of graffiti.~~ ~~Avoid details that are dependent on caulking for resistance to water infiltration.~~
IX.B.	SIDING AND FINISHES	1. Exterior Insulation Finishing System (EIFS), Dryvit ~~DRYVIT~~ or similar synthetic stucco systems are not acceptable for new buildings, additions or remodels. However, it is permissible for existing stucco systems to be repaired or replaced with like products. 2. Metal siding shall only be used above 8'-0" on school buildings. This restriction does not apply to outbuildings. Corrugated metal siding shall be installed vertically. Metal siding shall be factory finished with Kynar 500 fluorocarbon coating or equal. 3. Avoid details that are dependent on caulking for resistance to water infiltration. 4. Select materials that allow for easy removal of graffiti.
X.B.	CEILINGS; CEILING TILES	For areas over polished concrete floors and requiring sound absorption, use Armstrong School Zone Fine Fissured 1714.
XII.E.	CARPET	~~Backing: Unibond Flex, installed with Lees adhesive or equal with lifetime warranty and stain resistance~~ Carpet Backing: Integra HP, installed with Mannington Integra adhesive or equal with lifetime warranty and stain resistance.
XII.G.8.	Minimum Quality of Finishes for Selected Substrates	Stucco, Existing (no new stucco allowed): Primer: One coat, high quality acrylic latex primer Finish: Elastomeric, two coats

Rev 1 *continued on next page*

Rev 1: 12/23/16 *continued from previous page*

Section	Section Title	Revision
XII.G.11.	Minimum Quality of Finishes for Selected Substrates	Exterior Ferrous Metal (Bare, to be approved by BSD Representative, excluding handrails): Primer: Oil base primer Finish: Tnemec 2-part epoxy
XII.G.12.	Minimum Quality of Finishes for Selected Substrates	Exterior Ferrous Metal (Handrails): Galvanized

Rev 2: 12/31/17

Section	Section Title	Revision
III.	BSD Standard Room Finishes Schedule	Classrooms Flooring: Vinyl Tile (VCT), Polished Concrete, or Carpet Ceilings/Material: Acoustic Ceiling Tile (ACT) Armstrong ~~895 fissured~~ School Zone Fine Fissured 1714 Offices Flooring: VCT, Polished Concrete, or Carpet Ceilings/Material: ACT Armstrong ~~895 fissured~~ School Zone Fine Fissured 1714 Corridors Flooring: VCT or Polished Concrete Ceilings/Material: ACT Armstrong ~~895 fissured~~ School Zone Fine Fissured 1714 Cafeteria Flooring: VCT or Polished Concrete Ceilings/Material: ACT Armstrong ~~895 fissured~~ School Zone Fine Fissured 1714
X.B.	CEILINGS; CEILING TILES	The standard style of ceiling tile for suspended ceilings is 2/ by 4/ Armstrong ~~895~~ School Zone Fine Fissured 1714. For kitchens, use Armstrong 870B. ~~For areas over polished concrete floors and requiring sound absorption, use Armstrong School Zone Fine Fissured 1714.~~

Rev 3: 12/31/18

Section	Section Title	Revision
various	various	~~In accordance with ORS 279C.345, a link to a list of brand name products approved via School Board Resolution 14-409 which are used throughout the BSD Technical Standards can be found at:https://www.beaverton.k12.or.us/depts/facilities/development/Pages/Technical%20Standards.aspx~~ See List of Brand Name Products as approved via School Board Resolution 14409 in accordance with ORS 279C.345.

VII. B.	WALL FINISHES, DRYWALL, AND COVERINGS; BLOCKING	(See Division 6)
VIII.C.	INTERIOR WALLS; MOIST AND WET LOCATIONS	Use **mold and water-resistant drywall** as required by code **,** extending **4'** around water sources on both sides of the wall assembly. Provide visqueen (minimum: 4 mil) vapor barrier behind **the drywall at** shower walls, **mop** sinks, dishwash**ing** rooms, and exterior walls of walk-in coolers **and freezers.** Use **stainless steel wall finish at** mop sinks. **See Figure D9.1.**
XII. E.1.	SPECIFIC PRODUCTS; CARPET; Carpet Tile	Product: Carpet tiles shall be 324 sq inches or greater. Tiles less than 324 sq inches will require approval by BSD Representative. Manufacturers: Mohawk, Lees, Mannington, Interface, or equal, with lifetime warranty and stain resistance
XII. G. 13.	SPECIFIC PRODUCTS; PAINT MATERIALS	13. Hollow Metal, pre-primed (e.g., doors, frames): Finish: Exterior: Industrial Enamel, two coats Interior: Two coats, Rodda Paint **Multi Master DTM**, or equal

Rev 4: 1/2025

Section	Section Title	Revision
All	All	Renumbered all sections of the Technical Standard; included other minor formatting and edits for clarity.