Material Selection: Criteria & Examples

Webinar Presenters
• Clara Nakai
• Yessika Magdaleno
• Jameelah Hanif
• Pamela Campos
• Kathy Tama

Recording of Webinar at https://www.facebook.com/BuildUpCA/
FCC Facility Improvements
Material Selection Criteria & Examples

Based Selection on

Correct for the Function
Meets Criteria
Well Designed
Sustainability  Long-Life Cycle & Durable
Non-toxic
Warranty

American Standard “Baby Devoro”
Child Height Sinks

Installation Heights
• FCC Mixed age groups 21”
• Preschoolers 24”

Bathroom Vanity 24”
Take Off Bottom or Cut Legs off

36” Kohler Brockway K-3200
Indoor & Outdoor Sink

Available at stores like Home Depot - Lowes - Amazon
Outdoor Garden Sink

- No Plumbing Required – 2 hoses
  1 hose to connect to hose bib
  1 hose for drain
- Wall Mounted
- Weather Resistant

FCC Mixed Age Groups
Installation Height 21”
Preschoolers 24”

Sold online under various brand names
Genki, Modern Home, Brylane Home
Adult Touchless Kitchen Faucets

Example Moen Arbor MotionSense

Child Faucets

Faucet Extenders

Example Prince Lionheart

• With lever handles
• Easy for all ages to use
• Gooseneck

Examples Delta
Adult Sinks Criteria

- **18/10 Grade** of Stainless Steel - Durable
- **16 or 18 Gauge** - Thickness
- **Minimum Depth 6 inches**
- **Under Sink Insulation**
  - Pads or coating - dampens sound

Examples
Quality Sink Brands
- Kohler
- Elkay
- Kraus
Carpet Tile Criteria

• Non-Adhesive
  Stick to each other not to floor

• Easy to wash
  Pick up & wash in sink
  Put back

• To make Area Rugs
  Define activity space

• Movable
  Reconfigure to fit different spaces

Example Flor Carpet Tiles
Heavy Traffic
Acoustic Health

Criteria New Acoustic Tiles
• Noise Reduction Coefficient < .05
• & Formaldehyde-Free

• Add or Replace Acoustic Ceiling Tiles
  • Older type don’t reduce sound
  • 1985 most likely has asbestos

• Insulated HVAC ductwork

• Add Wall Panels & Area Rugs

• Repair replace Noisy Systems, Lights, Appliances, Fans, etc.

Example
Armstrong Ceilings for the Home
Ventilation

- Appropriate HAVAC System
- Operable Windows
- Ceiling Fans
- Portable Air Cleaners
  - Correct capacity for room
HVAC = Heating - Ventilation - Air Conditioning

Inspection Certified Inspector

Criteria
• Correct Capacity for Space
• 6 Air Exchanges/hr
• Fresh Air Mix, if possible
• Quiet
• Operable controls in each room
• MERV 13+ Filters

MERV 13 Filters
100% 3.0 microns
85% 0.3 microns
Ceiling Fans Ventilation

• Size to Room & Ceiling Height
• DC Motor - Quiet & Energy Efficient
• Cubic Feet per Minute CFM - Air Flow
  • Good CFM ranges from 4,000 to 5,000
  • Better ranges from 5,000 to 6,000
  • Best is over 6,000

• Rotate in Both Directions
  • Counter-Clockwise for Summer
    Downdraft creates breeze
  • Clockwise & on Low for Winter
    Updraft forces warm ceiling air down

Examples of Quality Fans

• Minka Aire
• Hunter
• Casablanca
Shade

- Shade in all Activity Areas
- Flexible
- If necessary, take down during winter
- Installation Tilt toward sun
- Wood or Metal Posts

San Diego Sail Shades
- San Diego Sail Shades - Website
- Sears
- Amazon

Coolaroo Shade Sails
- Coolaroo - Website
- Costco & Sam’s Club
- Home Depot & Lowes
- Walmart & Amazon
Roller Shades

Shade structure may need a side shade

Example
Coolaroo
Available at stores like
Home Depot - Lowes - Amazon
Sandbox Criteria

- High Play Value
- Sand control - Locate away from entrance
- 12” High Sides
- 6” Wide Ledge for Playing
- Curved Corners
- Large for Children to Play In
- Engineered Wood - Durable & Safe
- Warranty
- Cover

Example

“RSP Sandbox & Cover” by Nature of Early Play - online

Use #1 Olympia Sand
Use #1 Olympia Sand

- Screened
- Washed
- Want sand that can easily clump
- West Coast use #1 Olympia Sand
- East, South, Midwest use Equivalent

Available at Local Landscape & Building Material Supply Yards
Sand Differences

#1 Olympia Sand
- Screened & Washed
- Clumps!

#2 Olympia Sand
- Not screened
- Will not clump
- Course
In-Ground Sand & Dirt Area

- High Play Value - dirt different experience than sand
- Large - children to get into
- Large - both wet & dry sand play
- Water available
- Sand Dirt Management - locate far as possible from entrance
- Various Edging Options
- Provide Shade
In-Ground Sand Depth Drawing

PLAY SAND

OLYMPIA #1 SCREENED & WASHED SAND OR EQUIVALENT

SAND SHALL HAVE AN INFILTRATION RATE OF 20" PER HOUR AFTER COMPACTION

COMPACT TO MINIMUM 12" DEPTH FOR THE SAND PLAY AREA

1/2" TOOLED RADIUS

6" VERTICAL BAND FILTER FABRIC EPOXY TO CURB, CONTINUOUS TYP.

DRAIN ROCK 3/4" DIA. TYP.

SLOPE SUBGRADE TO DRAIN 2% MIN. TYP.
Child Access Outdoor Storage

- Weatherproof
- Lockable
- No pinch points
- Vented Floor
- Comes Assembled

Adult Outdoor Storage

- Weatherproof
- Lockable
- 4 Adjustable metal reinforced shelves
- Multi-walled resin

Community Playthings Outlast Shed 62"

Suncast Commercial Heavy Duty Resin Cabinet 30 x 20.2 x 72"
Artificial Turf

• **Cool Turf** has at least 1 of the following
  • Shaped Blades
  • Cool Tech Infill - no rubber pieces
  • Blades made with **Cool Grass Technology** Materials

• **Weight** 60-80 ounces

• If in Direct Sunlight, **Provide Shade**
  • Under Trees
  • Shade Sails

• **Light Color** Reflects Heat
Cool Turf

- Shaped Blades W, Mini-W, or Curvy W - not flat
  - 15 degrees cooler, than other shapes redirects heat

- Use **Cool Tech Infills** - no rubber pieces
  - Non-toxic coated sand
  - 30-50 degrees cooler
  - Can be used with any turf

- Examples
  - “TCool” or “HydroChill” Infills
Types of Cool Grass Technology & Turf Brands

“Heat Block” SynLawn Turf
  • Reduces heat by 20%

“Cool Yarn” Purchase Green Turf
  • Reduces heat by 20%

“Cool Blade” New Grass Turf
  • Reduces heat by 7-10 degrees

“CoolMax” GST Turf
  • Reduces heat by 15 degrees

“Tiger Cool” Tiger Turf
  • Reduces heat by 15% & up to 10 degrees
Foam Pad Under Turf = Safety Surface

Equipment 18 inches or higher requires a safety surface & a fall zone

Safety Surface

- Installing the appropriate padding will meet ASTM standards for various fall heights & ADA
- Pad - Quick Draining, Antimicrobial, Warranty
- Ask dealer what pad options are available

Fall Zones

- Under 2 yrs requires 3 feet radius around equipment
- 2 yrs+ requires 6 feet radius around equipment
Climbing Domes Criteria & Examples

• Ensure **Connections are safe** - no sharp edges
• Movable
• **Different Widths** to fit space
• **Different Heights** for children’s ages
• Use on a Safety **Surface**

Eely Peezy Climbing Tower
6’W & 4’H

6’ W & 3’H Climbing Domes

LifeTime Dome
9’W & 4.5’H

LifeTime Tower
8’W & 7’H
Safe Entry into Home Criteria

- Walkway & Stairs to house are in good condition
- Roof & Exterior Walls are in good condition
- Stairs have a Handrail in good condition
- Exterior is free from Standing or Pooling Water
- Exterior Entry way is Well Lit & Contains no Heath & Safety Hazards
- Interior Entry has Clear View of Anyone Entering
Mildew & Moisture Leaks

• Roof Inspection by Certified Inspector
  • Repair or Replace roof
• Replace Ceiling Tiles
• Repair or Replace Cabinets
• Repair or Replace Sinks & Toilets
• Replace Appliances
• Repair or Replace Windows & Doors
• HEPA Vacuum
Safety

Doors Hinge Guards
- Prevents pinched hand & finger injuries
- Install on all doors
- FingerSafe - online

Walls & Ceilings Paint
- Every 3 yrs
- Use Zero VOC Paint
  - Most Paint Manufactures have it
  - Ask for it
  - Washable Finish
Optimal Electrical Lighting

- Well-lit all areas, no shadows
- Broad Ambient & Task
- Variety fixtures
- Dimmable for napping
- LED energy efficient

Lumens = Brightness

- 1600 Lumens = 100W bulb
- 1100 Lumens = 75W Bulb
- 800 Lumens = 60W Bulb

Kelvin = Color

Energy Efficient LED Bulbs can replace almost all light bulbs
Safety

Repair to Good Condition or Replace if at End of Useful Life

- Doors & Windows
- Appliances
- Floors
- Cabinetry, Counters
- Build-in Shelving
- Sinks, Faucets
- Outlets
- Lighting
Flooring

Examples:
- COREtec Vinyl Plank Flooring
- or Comparable Mohawk - Residential Product

Available at Local Flooring Stores

Criteria:
- Waterproof
- Thick Wear Layer
- Dent-Resistant
- Sound-Proof Backing
- Mold Resistant
- 30 yr Warranty
Doors & Windows Criteria

Doors
- Visibility Panels in all Doors for Safety & Natural Light

Windows
- Safety Glass or has Window Safety Film
- Operable for Ventilation
- Has Screens
- Window Coverings Controls Glare

Security Screens - if needed
- Ventilation & Safety

Available at stores like
- Local Lumber Yards
- Local Door Stores
- Home Depot
- Lowes
Appliances Criteria & Examples

Dishwasher Criteria
• With Sanitizing Cycle
• Energy Efficient
• Highly Rated Durability

Examples
• Bosch 300 DXL
• Bosch Ascenta

Refrigerator Criteria
• With Filtered Drinking Water
• Energy Efficient
• Highly Rated Durability
• Measure Correct Size Height & Width

Examples
LG Models
Washer & Dryers Criteria & Examples

Criteria

- Sanitizing Cycle
- Durable
- Quite

Examples Highly Rated
LG Models
Examples Residential Vacuums with HEPA Filters

Shark Rotator
Shark Navigator
Hoover Wind Tunnel Air

Available at stores like

- Target
- Lowes
- Kohls
- Walmart
- Online - Amazon
Storage & Increase Activity Space

• Install Wall Cabinets
  • Conveniently Located
  • Increases activity space by freeing up floor space
  • Store toys over activity area

• Enough Storage
  • Not all toys out at one time, rotate them, trip hazard
  • Children’s Space free of Clutter - easier for child to focus

• Sturdy & Organized Shelving & Containers
  • Labeled & materials clearly visible

• Out of Classroom Storage - larger items
Shelves Criteria & Examples

• To define activity areas from living spaces
• Storage for toys to keep floor safe
• Wheels built into shelf bottom
• Rounded Corners
• Well Designed & Constructed
• Durable Long-Life Cycle
• Fixed or adjustable shelves
Wall Storage Cabinets

- Conveniently Locate in Activity Areas
- Frees Up Floor Space
- Rounded Corners & Durable
- Comes Assembled

Examples

Community Playthings

Whitney Brothers
Mats Indoor & Outdoor Criteria

Indoors

• Define Activity Areas
• Durable
• Custom Sizes
• Easy to clean
• Neutral colors
• 2” Thick

Example
Safe Space Concepts Mats

Outdoors

• Fall Zone
• Meet ASTM F1292 for drop heights of 4’ 5’ 8’
• Light Weight
• Mildew Resistant
• UV Rated
Walkup Changing Table with Sink

Made by Tot Mate

Sink needs to be plumbed in

Kaplan Early Learning
32521 Sink on Left

Kaplan Early Learning
81524-NT Sink on Right
No Plumbing Required Changing Table & Sink

- On-Demand Hot Water System
- Quick Connect Tank System
- Maple Finish Laminate Cabinet
- Movable 5” Locking Casters
- Use with Toddler Steps

Ozark River
Kiddie Station KSSTM-ABW-AB1N

Example
Community Playthings Toddler Step Stool
Diaper Wall Storage & Changing Table with Steps

- Locate above Changing Table
- Rounded Corners
- Lower Section Designed for Head Clearance
Criteria

- Child Feet to be on Floor when sitting
- Able to Safely get in & out of chair
- Able to independently do activity
- Weight so not to tip over
- Designed for different ages
- Rounded Edges, Durable & Strong

Example
Community Playthings Chairs
Chair & Table Height Guidelines

Have Different Height Chairs so Children’s Feet Touch Floor

Children should never sit for prolonged periods in the wrong size chair with their feet dangling. A chair should comfortably fit the child and allow the child to sit in a natural, relaxed, supported way while keeping his/her feet on the floor or a stable surface to improve postural stability.

— Professor Alan Hedge, Ph.D., CFPE, Division of Health Factors and Ergonomics Laboratory, Cornell University

To determine correct chair and table height:

1. Chair seat height: The most important calculation you can make. If a child’s feet are flat on the floor and her knees are bent at a 90° angle, you have the correct chair for her appropriate, comfortable seating. The chart on the right gives you chair height recommendations by age.

2. Chair back height: in most cases, table tops should be 2 inches above the chair seat so the table and chair can work together for a child’s good posture. (There’s a little beauty for toddlers—see guidelines on facing page.)

Knees are bent at 90°

Table Top Height Guidelines

<table>
<thead>
<tr>
<th>Chair Seat Height</th>
<th>5&quot;</th>
<th>6&quot;</th>
<th>6½&quot;</th>
<th>8&quot;</th>
<th>10&quot;</th>
<th>12&quot;</th>
<th>14&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table Top Height</td>
<td>12&quot;</td>
<td>13&quot;</td>
<td>14&quot;</td>
<td>16&quot;</td>
<td>18&quot;</td>
<td>20&quot;</td>
<td>22&quot;</td>
</tr>
</tbody>
</table>
Child Classroom Tables

Criteria
- Rectangle Shape
- Adjustable legs - tool free
- Sturdy & Durable
- Rounded Corners
- Easy to Clean
- Only enough tables for children to eat meals

Example
Community Playthings Rectangular Classroom Table

Rectangle Classroom Tables
- Takes up Less Space than round or kidney shaped
- Frees up Floor Space for Activities & Circulation 33”-36” between tables
- Encourages Social Interactions & Language Development - sit closer together