

FINISHING THE PLAY:

Final Touches that Make the Difference

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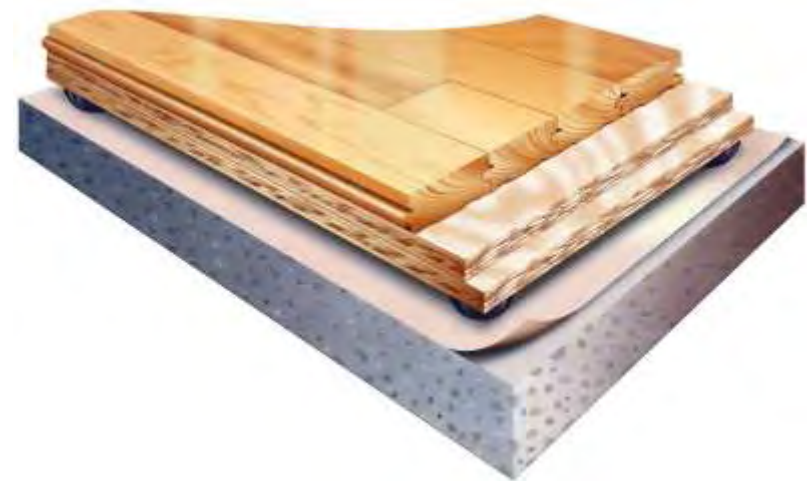
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PRESENTATION OUTLINE

- I. INTRODUCTION
- II. DESIGN PROCESS
- III. DETAILS
- IV. ACTION PLAN
- V. SUMMARY



PRESENTATION OBJECTIVES

- Understand the importance and cost impact of details in facility design
- Distinguish between Owner/Operator and Architect/Contractor responsibilities
- Develop an action plan to ensure that project details are adequately addressed



DETAILS MAKE A DIFFERENCE

- SOUND OF CAR DOOR CLOSING INFLUENCES CONSUMER'S PERCEPTION OF QUALITY
- DINING SATISFACTION RISES 17.3% WHEN DINERS AND CHEFS CAN SEE EACH OTHER
- JOINT CONSTRUCTION IS THE MAIN DETERMINANT OF QUALITY FURNITURE
- KNOBS – PLACEMENT, SIZE, STRUCTURE – INFLUENCE APPLIANCE PURCHASES



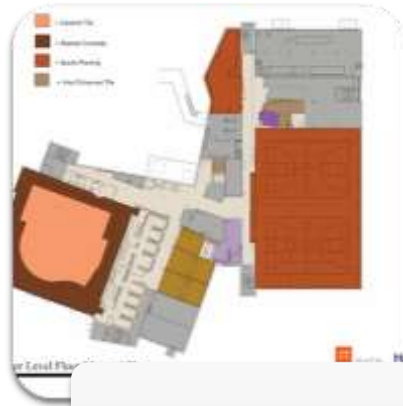
PART II

DESIGN PROCESS

WHEN TO ADDRESS DETAILS



PRE-DESIGN
PROGRAMMING



DESIGN



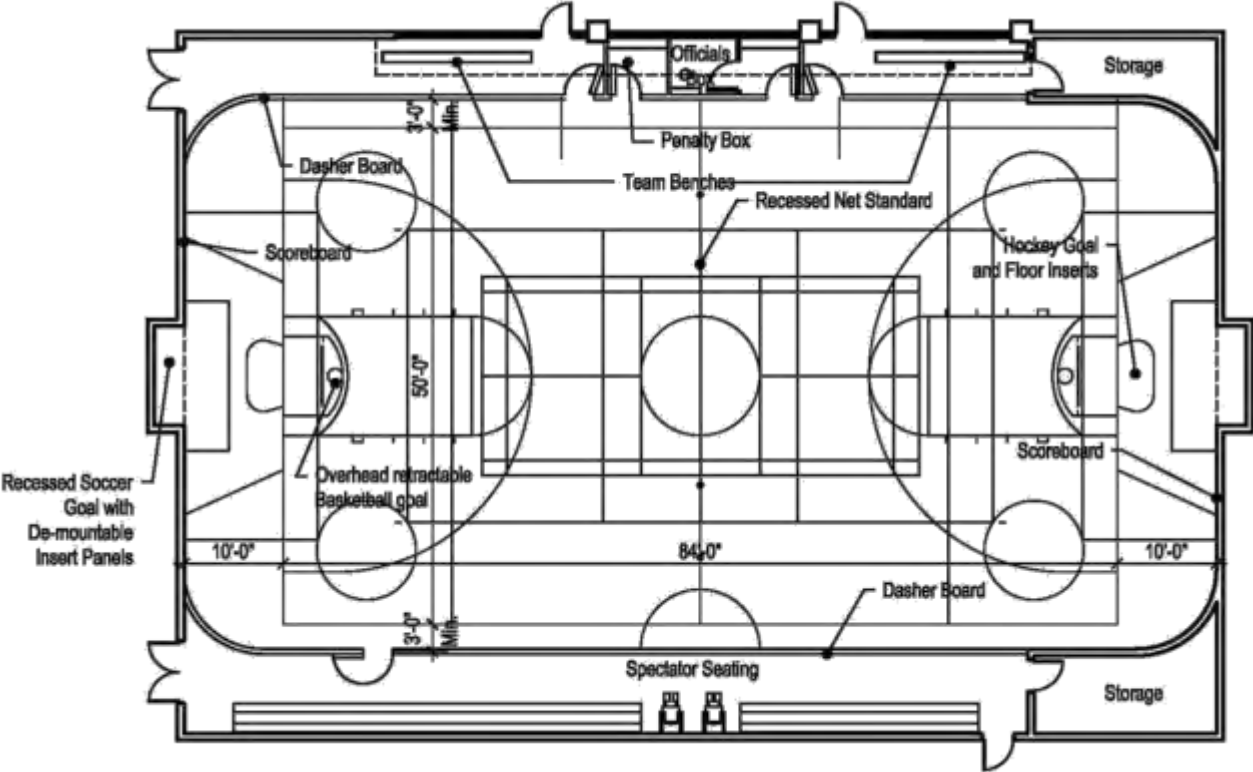
CONSTRUCTION



OCCUPANCY

TECHNICAL DATA REQUIREMENTS

Occupants:	To be determined based on code requirements
Function:	Multi-purpose court for indoor soccer, hockey, basketball, volleyball, etc.
Adjacency:	Spectator / Athlete Seating / Boxes MAC Gymnasium Storage
Environment:	
Floor:	Synthetic floor
Walls:	CMU or gypsum board above 18'
Ceiling:	Exposed structure, acoustical deck; 25' height minimum
Windows:	Exterior windows
Doors:	3' x 7' wood doors
Equipment:	2 power operated retractable basketball backboards, Floor sleeves for volleyball net standards, wall mounted Scoreboards, protected clocks, dasherboard system
Furnishings:	Volleyball / badminton nets and standards
Mechanical:	Dedicated HVAC zone
Electrical:	Duplex electrical outlets per code, power/data for backboards, scoreboards HID or LED lighting
Notes:	Provide rounded corners and fixed, recessed goals 12' wide, netting to keep balls in play See Section 3D Electrical for media and AV requirements



WHO IS RESPONSIBLE?

- OWNER

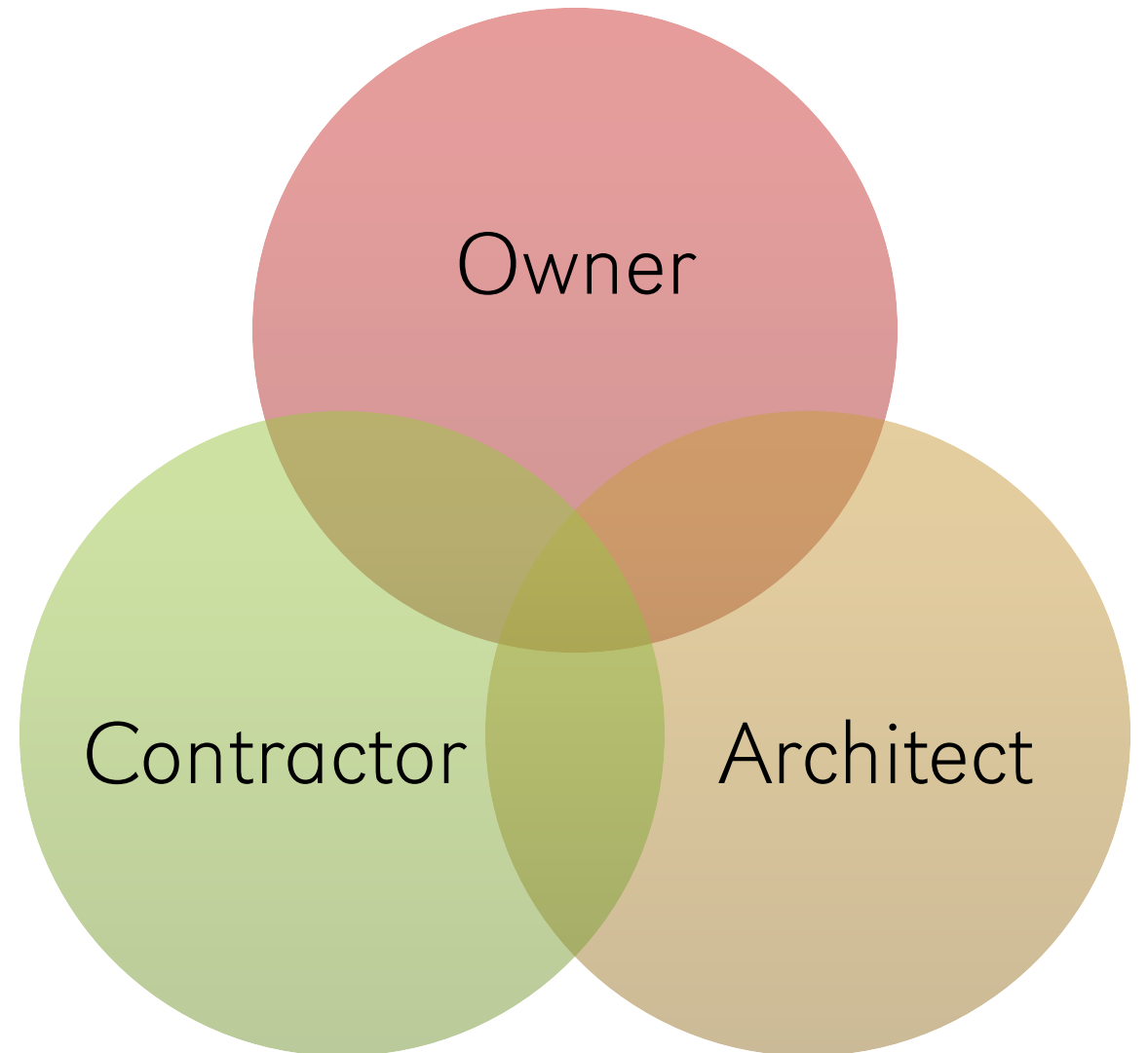
- Selection of project team
 - Furniture & Equipment
 - Operations plan

- ARCHITECT

- Programming
 - Design
 - Specifications

- CONTRACTOR

- Expertise
 - Execution



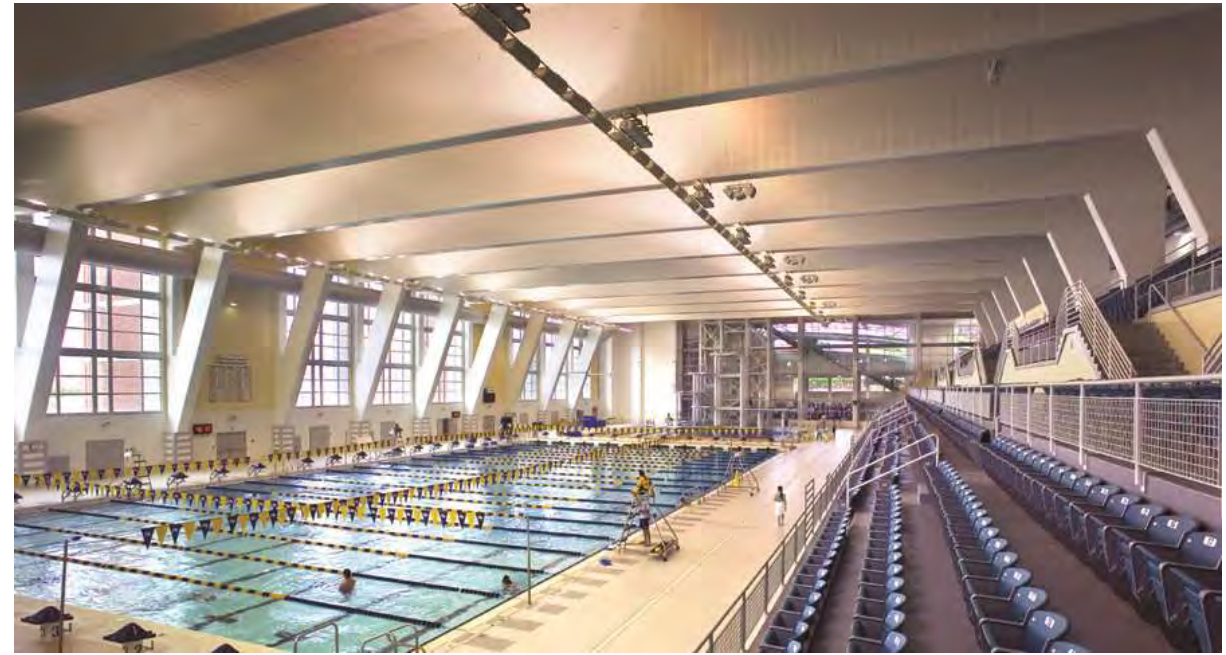
TYPES OF DETAILS

- ARCHITECTURAL

- Functional
 - Aesthetic

- OPERATIONAL

- User experience
 - Brand/Identity
 - Work Plan



ONLINE SURVEY

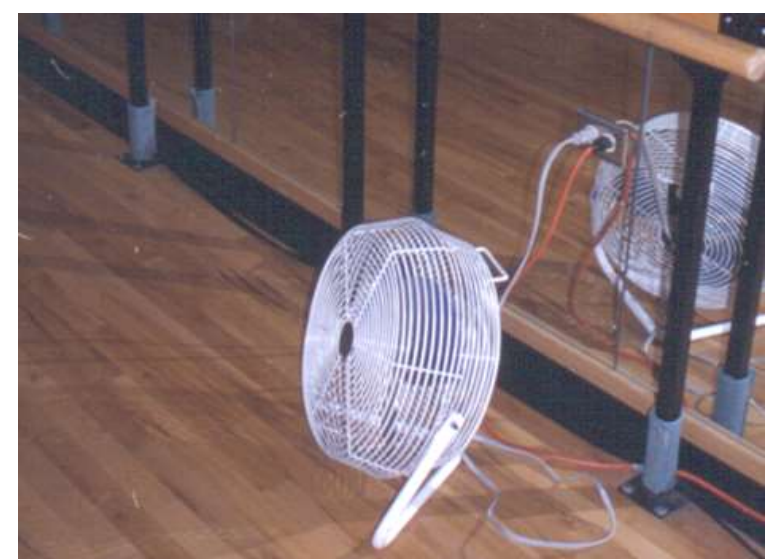
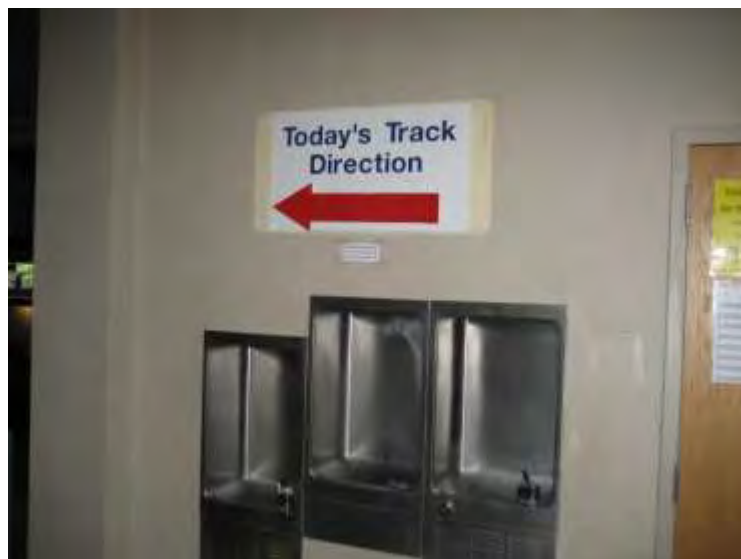
- NIRSA COMMUNITY NEWSLETTER
- DIRECT E-MAIL
- 92 QUESTIONS + COMMENTS
- RESULTS CONVERTED TO 100 POINT SCALE
Range 41 - 95
- DETAILED RESULTS AVAILABLE

GENERAL	SPACES
EMPLOYEE DRESS CODE	ENTRY VESTIBULE
CODE OF CONDUCT	LOBBY/CIRCULATION
HOURS OF OPERATION	CONTROL DESK
BROADCAST MUSIC	OFFICE SUITE
WI-FI COVERAGE	MEETING ROOMS
CELLULAR COVERAGE	FITNESS/WEIGHTS
BRANDING PROGRAM	GYMNASIA
SIGNAGE	JOGGING TRACK
WATER FOUNTAINS	MULTI-PURPOSE ROOMS
SECURITY	POOL
STORAGE	CLIMBING WALL
	LOCKERS/TOILETS

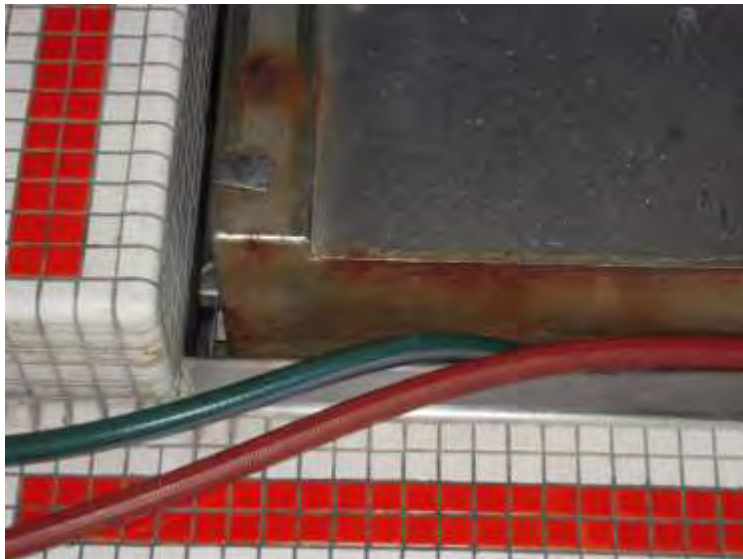
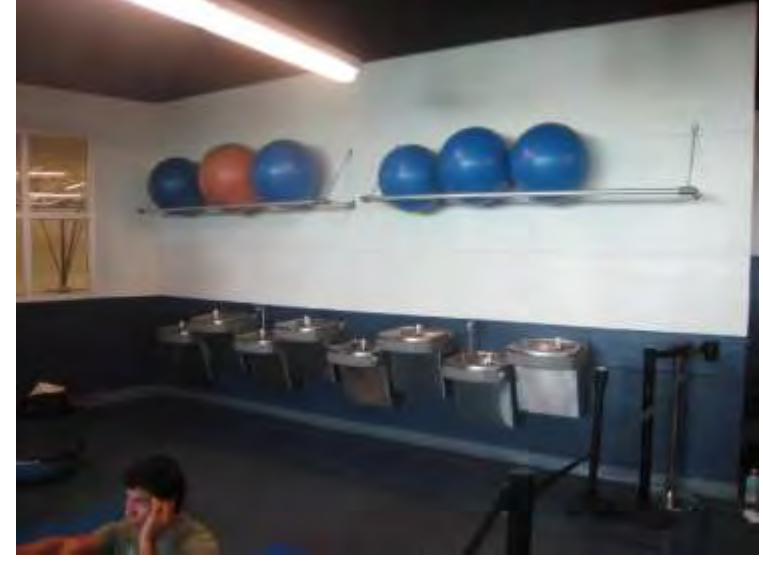
PART III

DETAILS

WHEN DETAILS ARE IGNORED



WHEN DETAILS ARE IGNORED



LOBBY

- IMAGE AND IDENTITY
- VISUAL LINK
- FINISHES
- WAYFINDING
- ADA ACCESS



FLOOR FINISHES



COLORLED CONCRETE \$5-10/SF

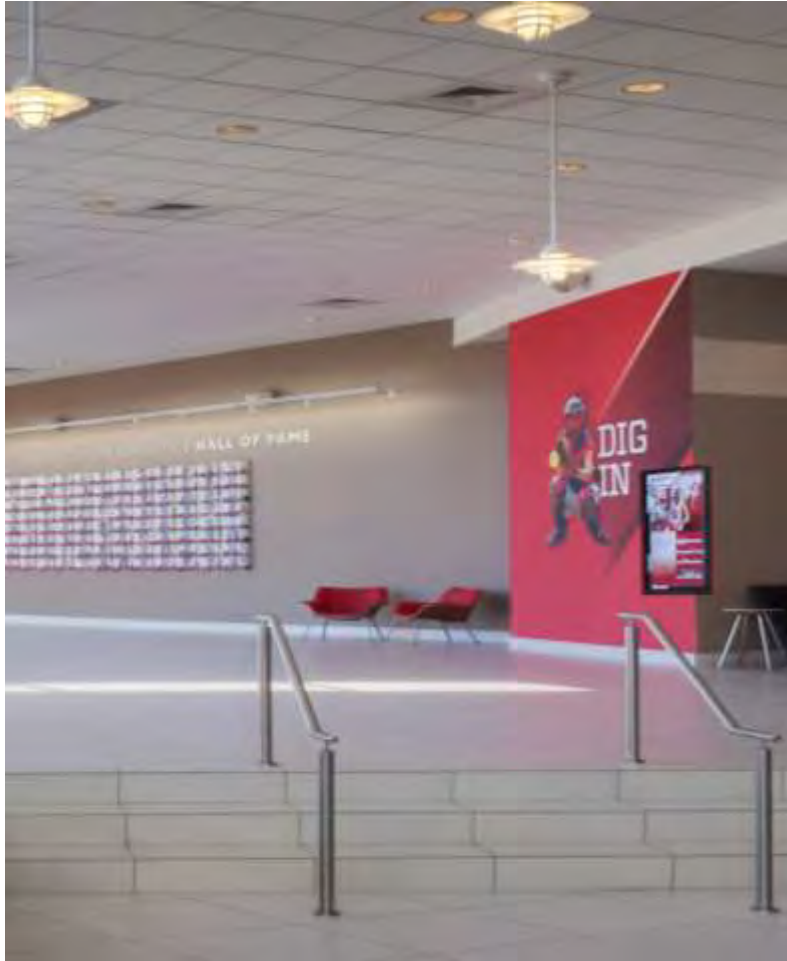


PORCELAIN TILE \$13/SF



TERRAZZO/STONE \$20/SF

WALL FINISHES



DRYWALL \$8/SF



GROUND FACE CMU \$18/SF

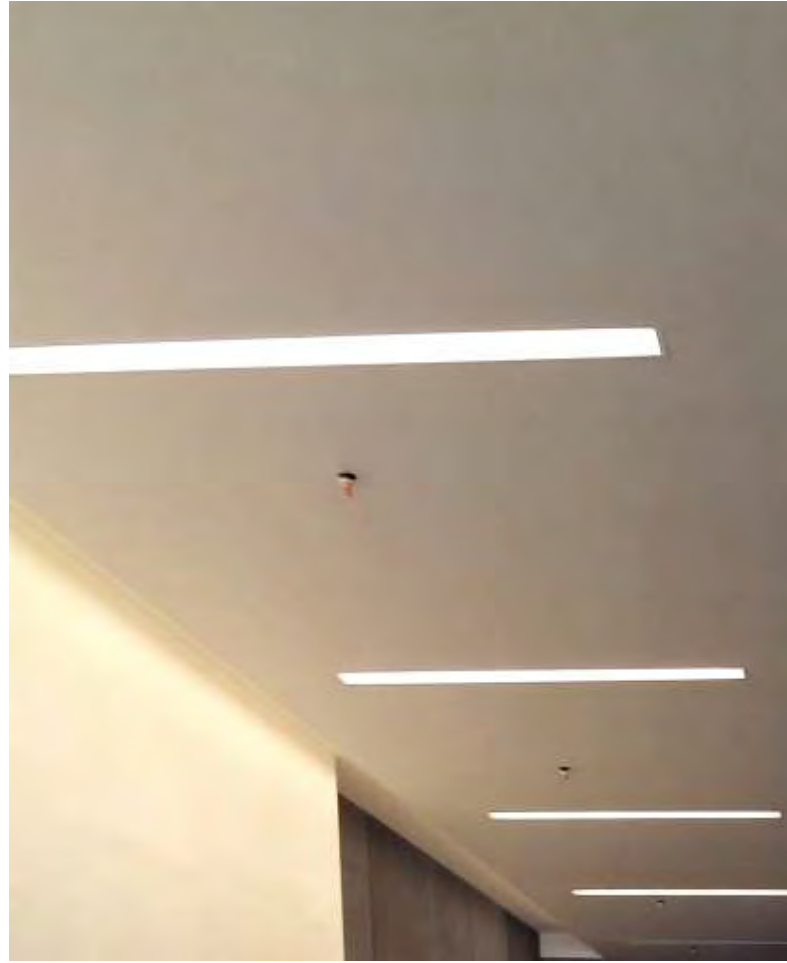


BRICK/STONE \$26 - \$52/SF

CEILING FINISHES



ACOUSTICAL TILE \$4/SF



DRYWALL \$6/SF



SPECIALTY CEILING \$18/SF

LOBBY

- IMAGE AND IDENTITY
- VISUAL LINK
- FINISHES
- **WAYFINDING**
- ADA ACCESS



LOBBY

- IMAGE AND IDENTITY
- VISUAL LINK
- FINISHES
- WAYFINDING
- **ADA ACCESS**



ENTRY VESTIBULE

- **MINIMUM 12'
DEPTH**
- EXTERIOR TO
INTERIOR
 - Covered
approach
 - Snow melt
- FLOOR FINISH
- DOOR OPERATORS
 - ADA
 - Automatic



ENTRY VESTIBULE

- MINIMUM 12'
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- EXTERIOR TO
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 - ADA
 - Automatic

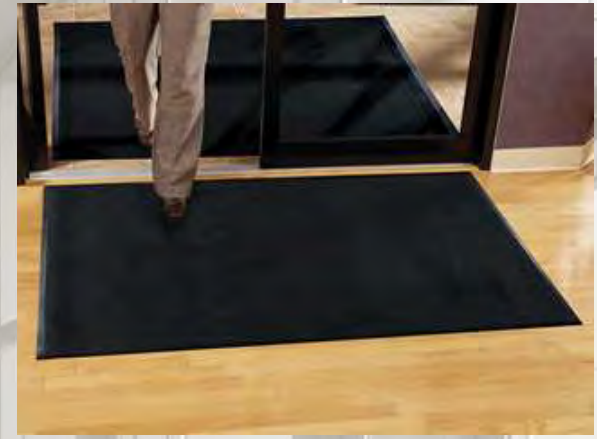


ENTRY VESTIBULE

- MINIMUM 12'
DEPTH
- EXTERIOR TO
INTERIOR
 - Covered
approach
 - Snow melt
- **FLOOR FINISH**
- DOOR OPERATORS
 - ADA
 - Automatic



THROW MAT \$3/SF



MAT TILE \$8/SF

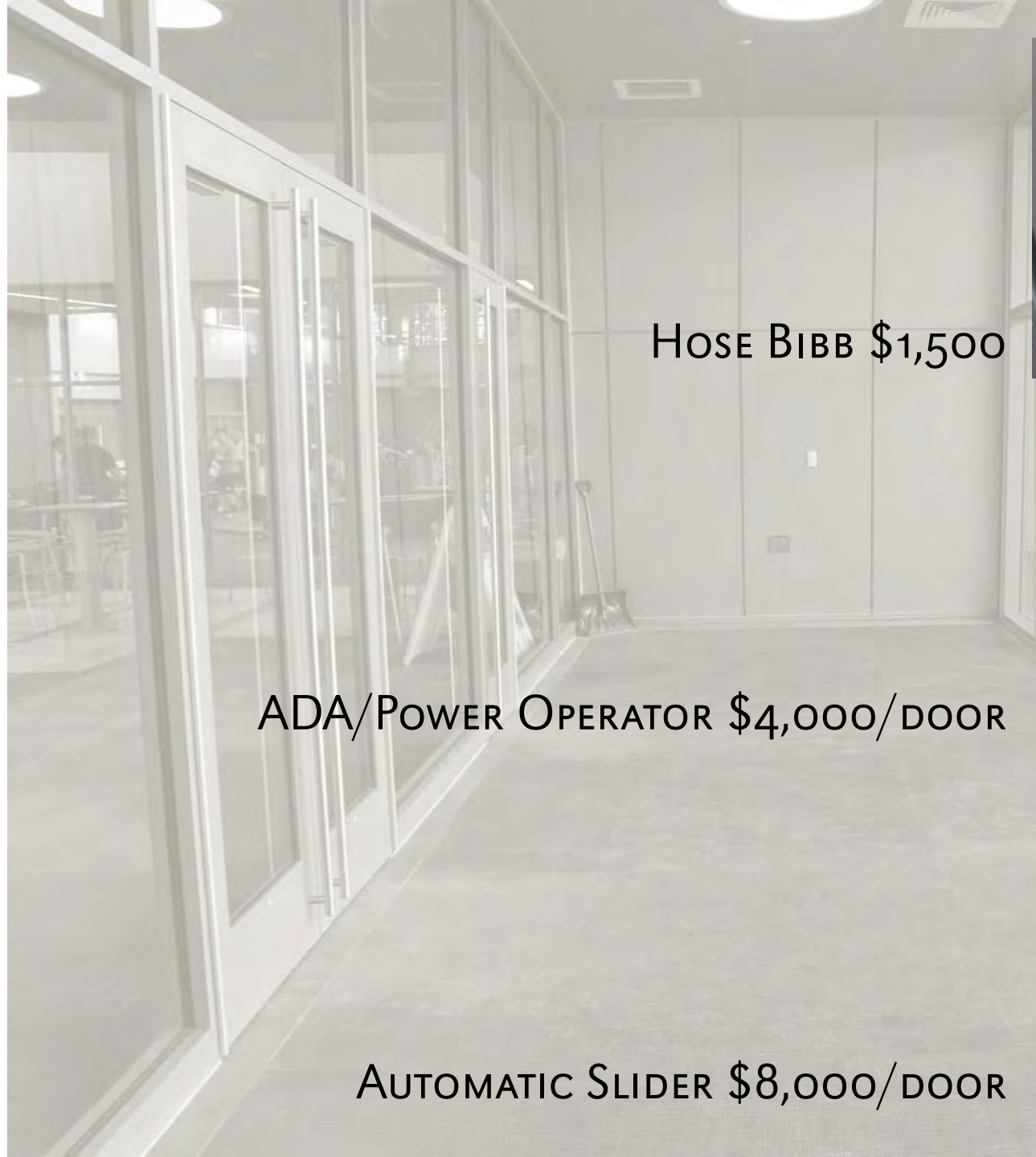


RECESSED MAT \$30/SF



ENTRY VESTIBULE

- MINIMUM 12'
DEPTH
- EXTERIOR TO
INTERIOR
 - Covered
approach
 - Snow melt
- FLOOR FINISH
- **DOOR OPERATORS**
 - ADA
 - Automatic



HOSE BIBB \$1,500



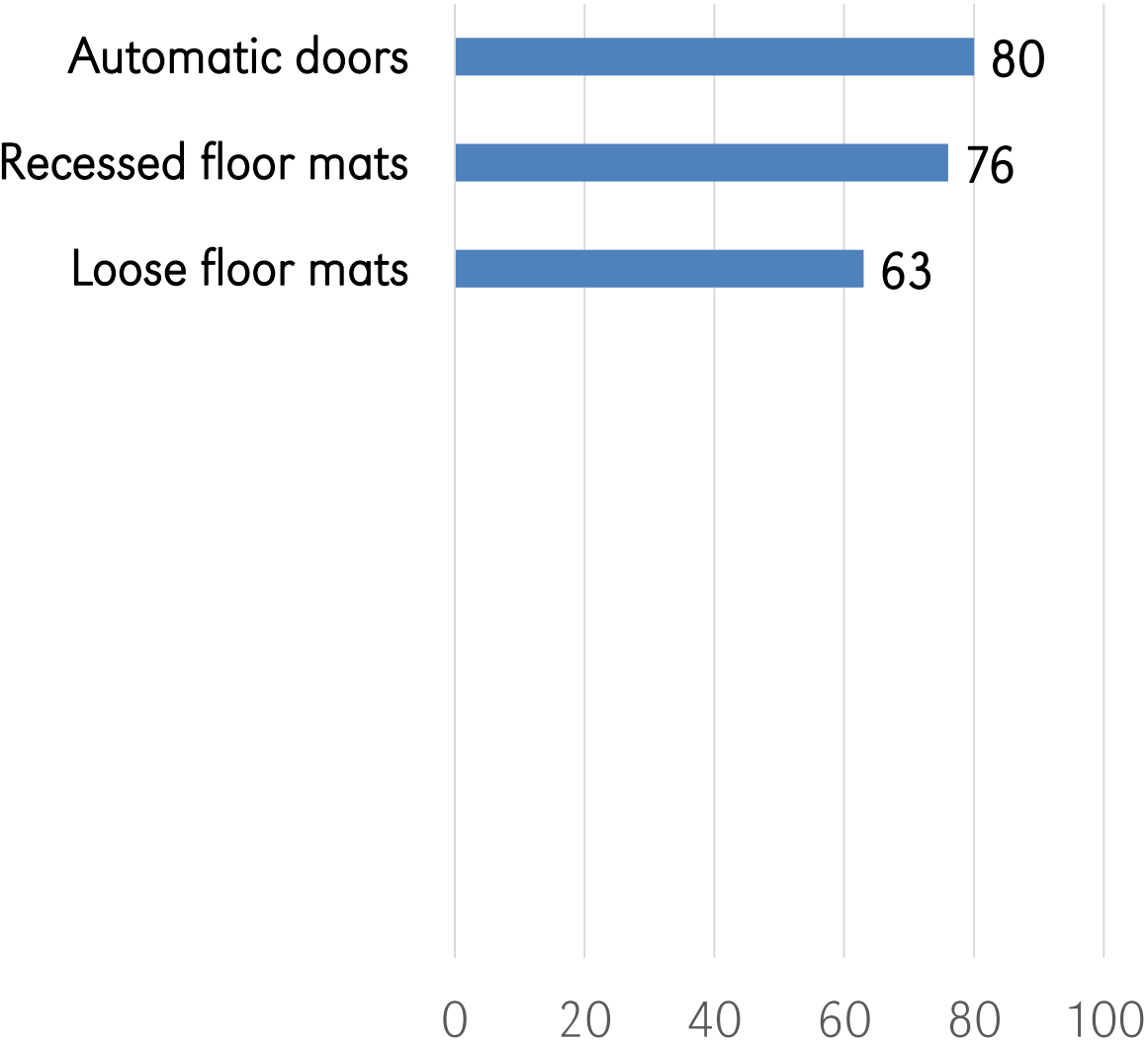
ADA/POWER OPERATOR \$4,000/DOOR



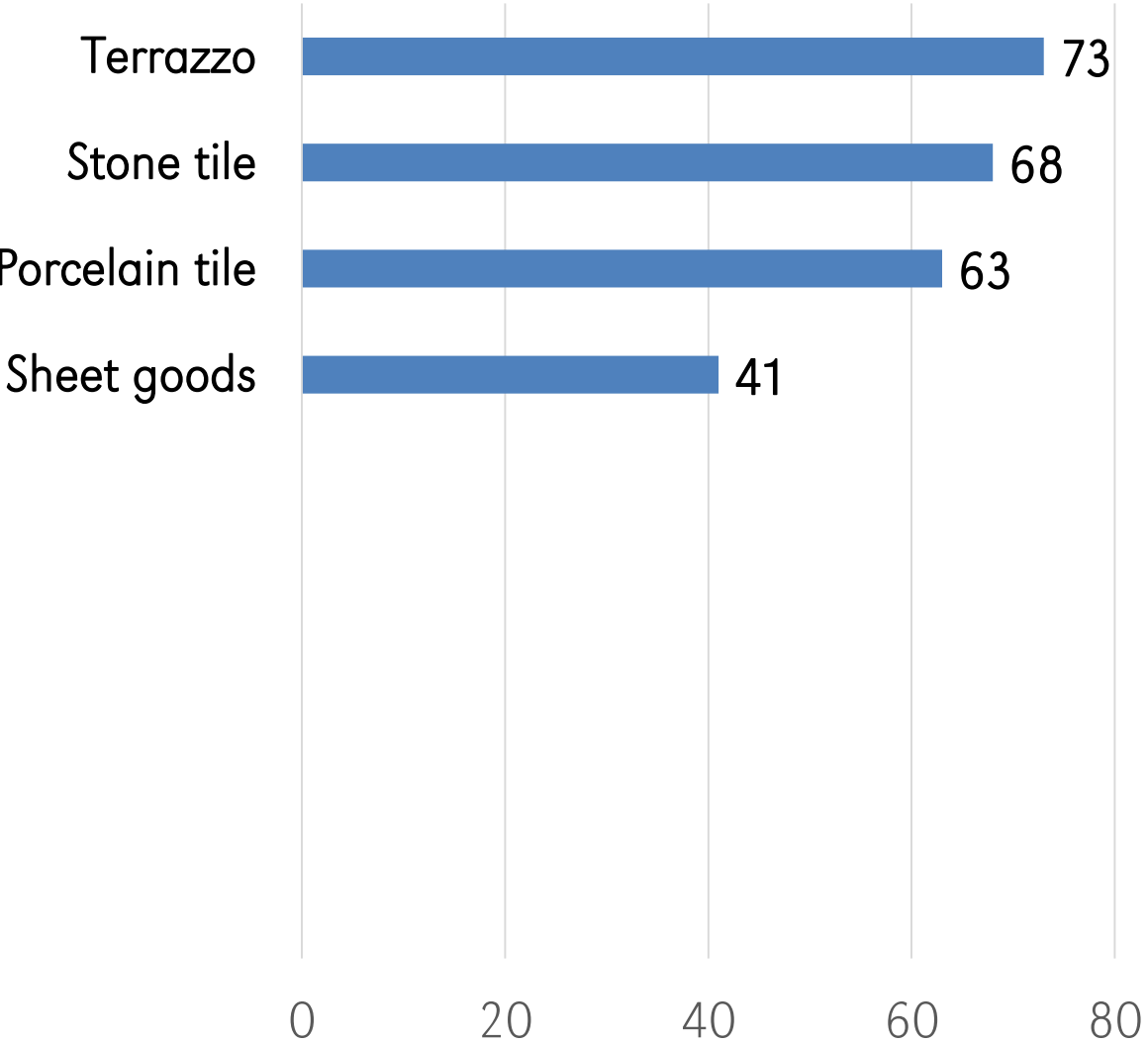
AUTOMATIC SLIDER \$8,000/DOOR



ENTRY VESTIBULE



PRIMARY FLOOR FINISHES



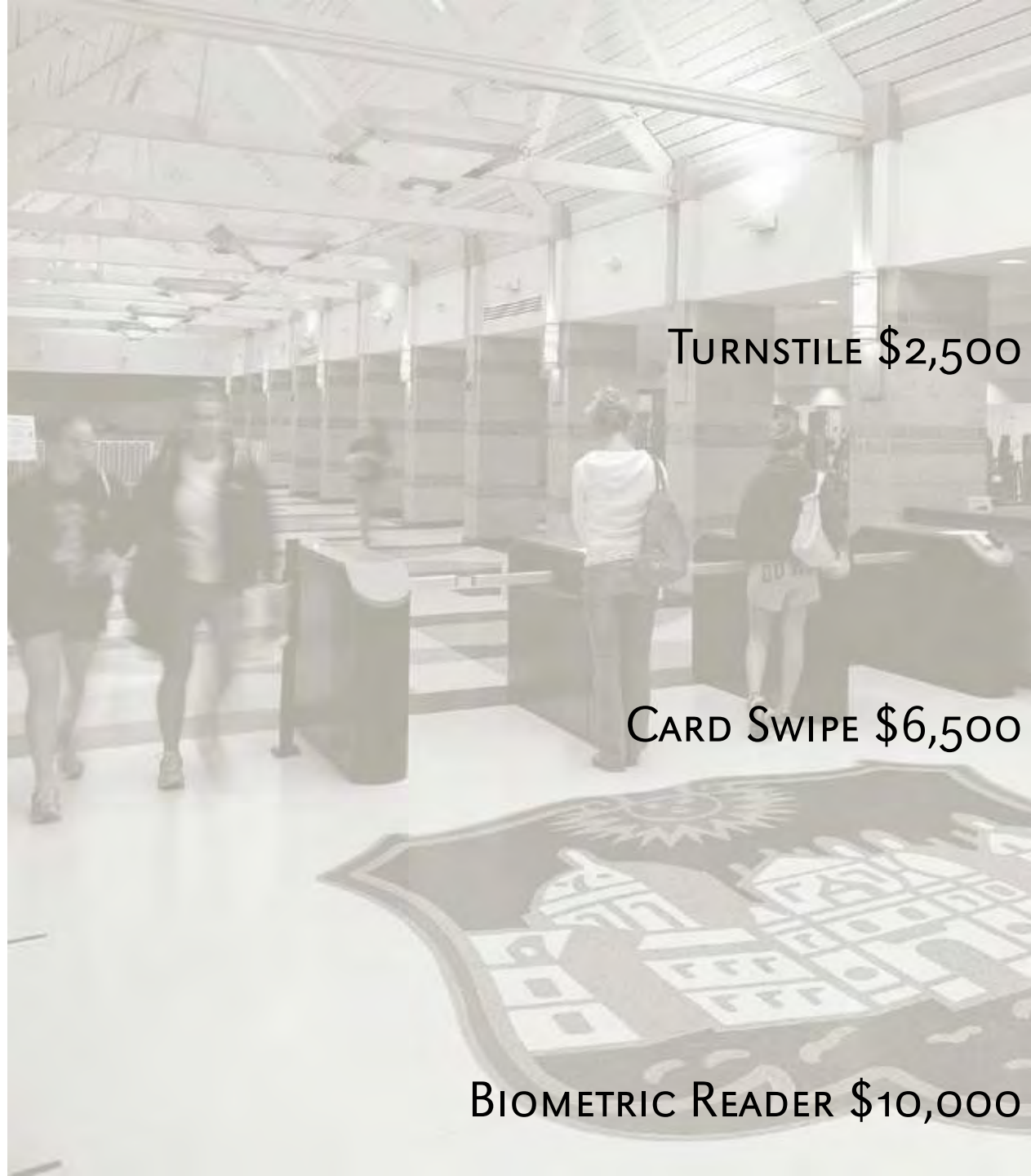
CONTROL DESK

- SINGLE POINT OF CONTROL
- TURNSTILES / ID SYSTEM
- INFORMATION
- SERVICE
- ADA ACCESS



CONTROL DESK

- SINGLE POINT OF CONTROL
- **TURNSTILES / ID SYSTEM**
- INFORMATION
- SERVICE
- ADA ACCESS



TURNSTILE \$2,500



CARD SWIPE \$6,500



BIOMETRIC READER \$10,000



CONTROL DESK

- SINGLE POINT OF CONTROL
- TURNSTILES / ID SYSTEM
- **INFORMATION**
- **SERVICE**
- ADA ACCESS

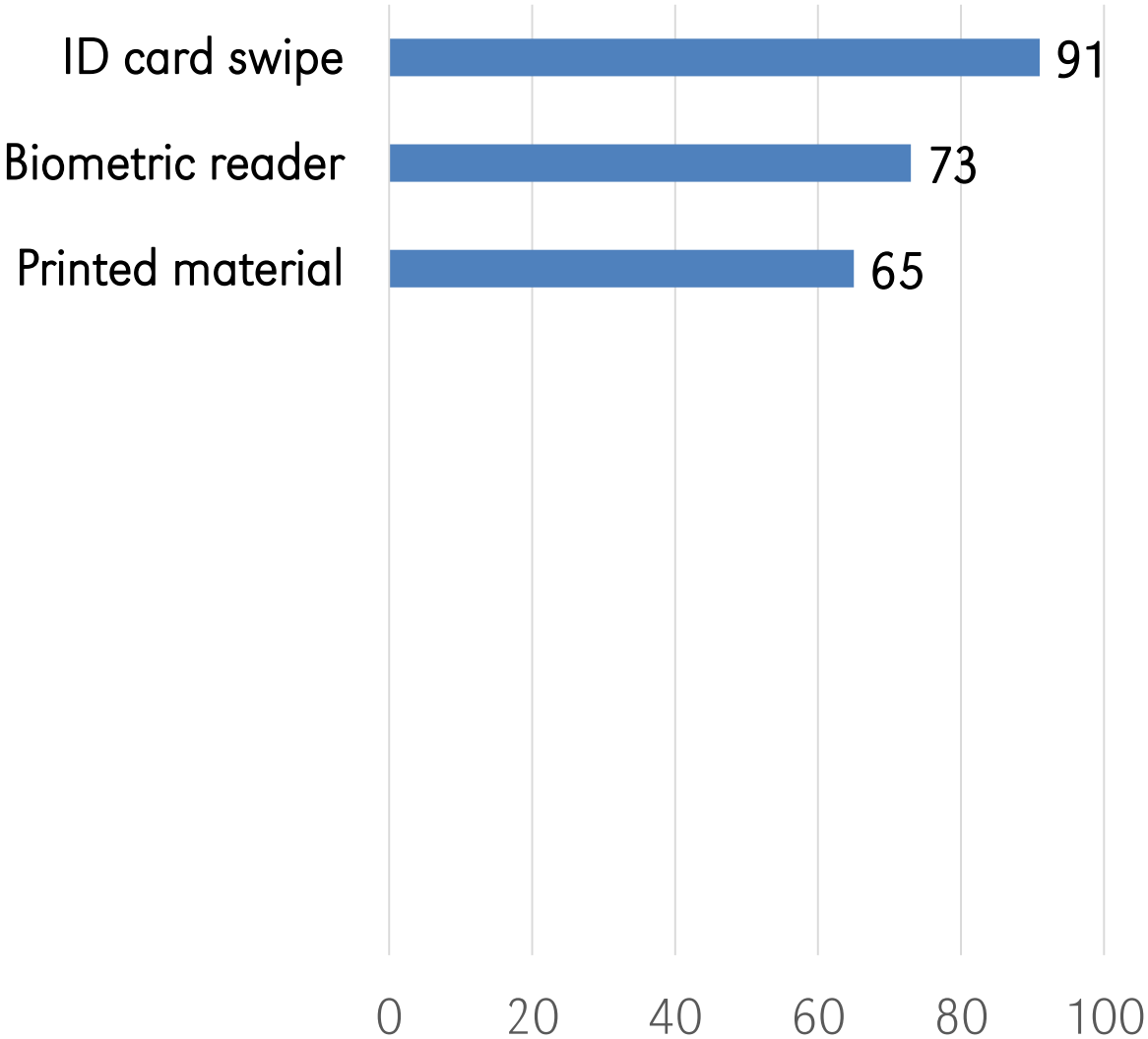


CONTROL DESK

- SINGLE POINT OF CONTROL
- TURNSTILES / ID SYSTEM
- INFORMATION
- SERVICE
- **ADA ACCESS**



CONTROL DESK



CIRCULATION

- VISUAL LINK
- INTEGRATED WAY FINDING
- DAY LOCKERS
- WATER FOUNTAINS



CIRCULATION



WAY FINDING



DAY LOCKERS \$500/UNIT

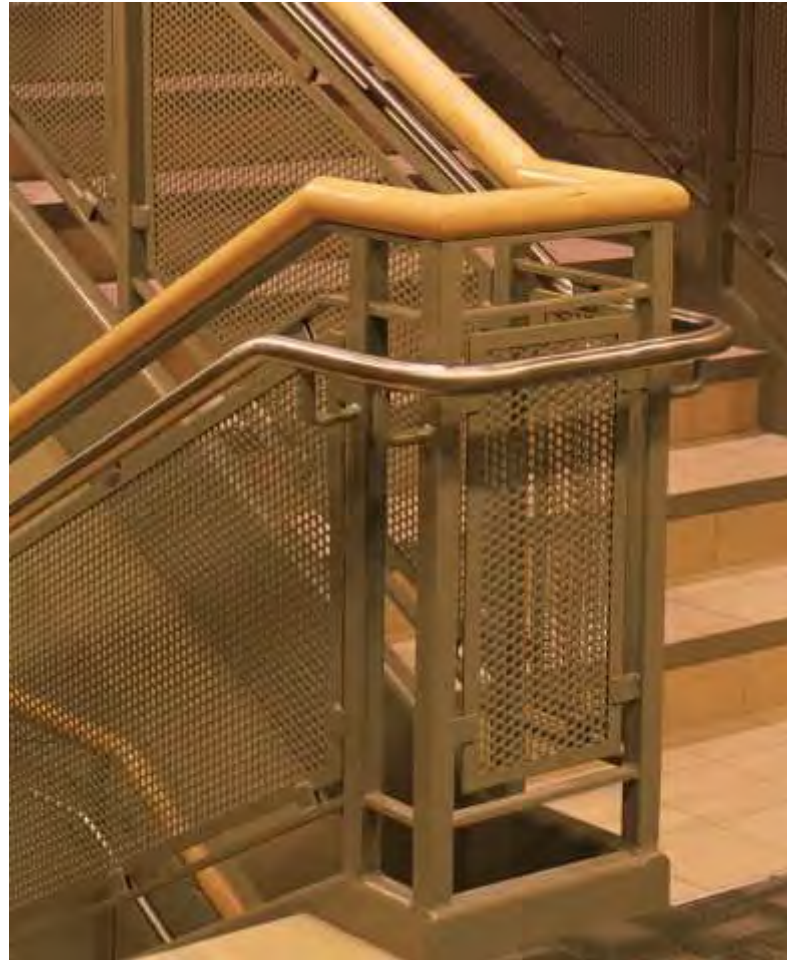


WATER FOUNTAIN \$6,200

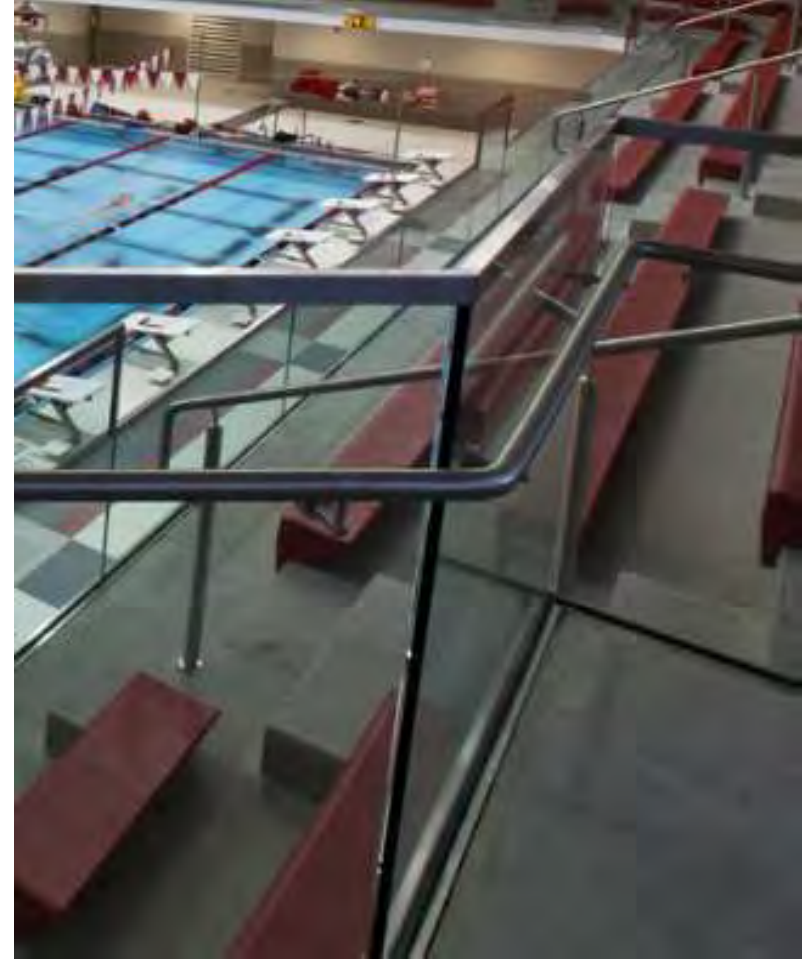
GUARDRAILS



PAINTED STEEL \$100/LF



STEEL/ALUM/WOOD \$225/LF



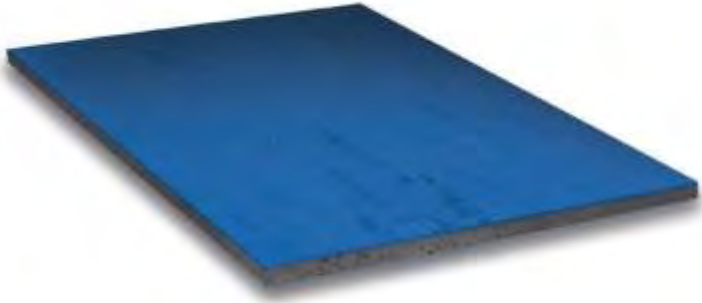
GLASS \$350/LF

FITNESS CENTER

- FLOORING
- POWER, DATA
- CEILING FANS
- EQUIPMENT
CLEANING
- AV SYSTEMS



FITNESS CENTER FLOORING



RUBBER TILE \$9-12/SF



RUBBER SHEET \$9-12/SF



PAD & POUR \$10-12/SF

FITNESS CENTER

- FLOORING
- POWER, DATA
- CEILING FANS
- EQUIPMENT
CLEANING
- AV SYSTEMS

RECESSED FLOOR BOXES \$500/OUTLET



CEILING FANS \$1,500/UNIT



CLEANING STATIONS/TOWELS \$400/UNIT



FITNESS CENTER

- FLOORING
- POWER, DATA
- CEILING FANS
- EQUIPMENT
CLEANING
- **AV SYSTEMS**



WEIGHT ROOM

- FLOORING
- POWER, DATA
- CEILING FANS
- EQUIPMENT
CLEANING
- AV SYSTEMS



FITNESS CENTER

- FLOORING
- POWER, DATA
- CEILING FANS
- EQUIPMENT
CLEANING
- **AV SYSTEMS**

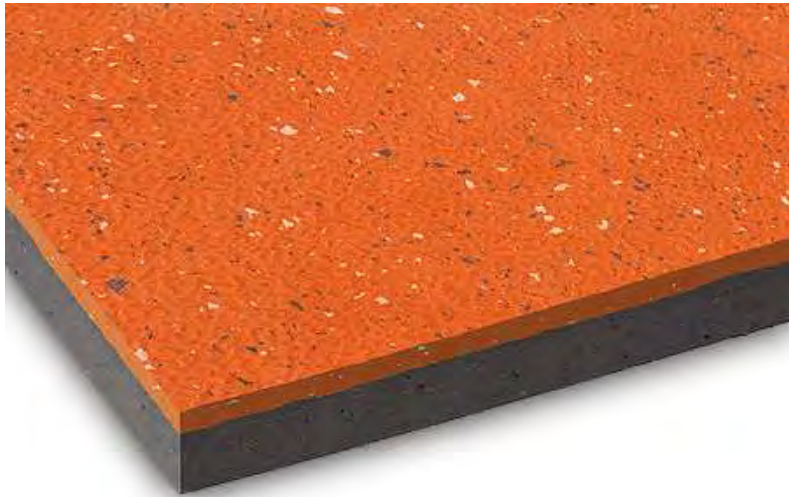


WEIGHT ROOM

- FLOORING
- LIFTING PLATFORMS
- CEILING FANS
- AV SYSTEMS
- WALL / MIRROR PROTECTION



FLOORING – FITNESS CENTER



RUBBER TILE/SHEET \$9-12/SF



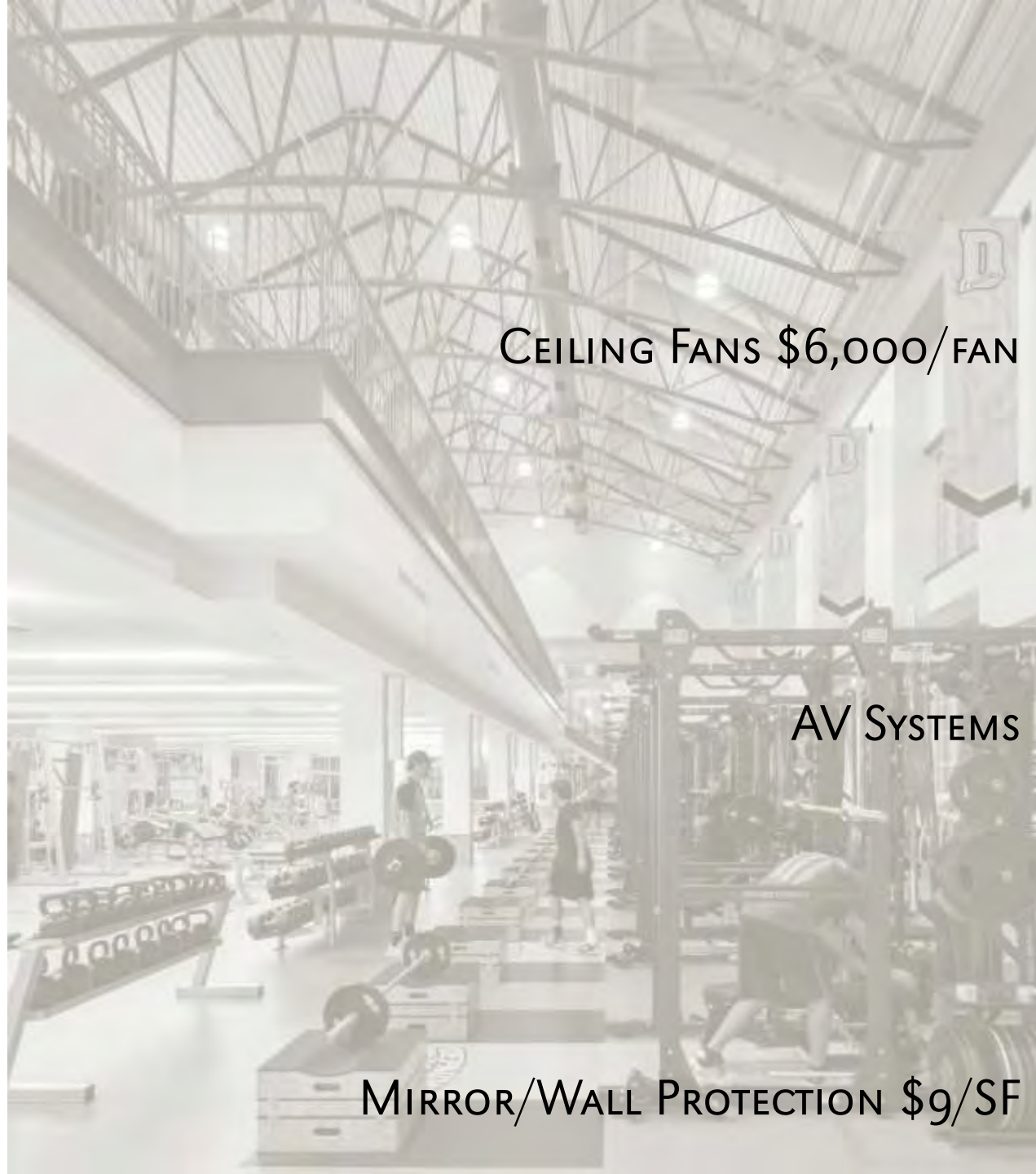
LIFTING PLATFORM \$12/SF



LIFTING PLATFORM \$40/SF

WEIGHT ROOM

- FLOORING
- LIFTING
PLATFORMS
- CEILING FANS
- AV SYSTEMS
- WALL / MIRROR
PROTECTION



CEILING FANS \$6,000/FAN



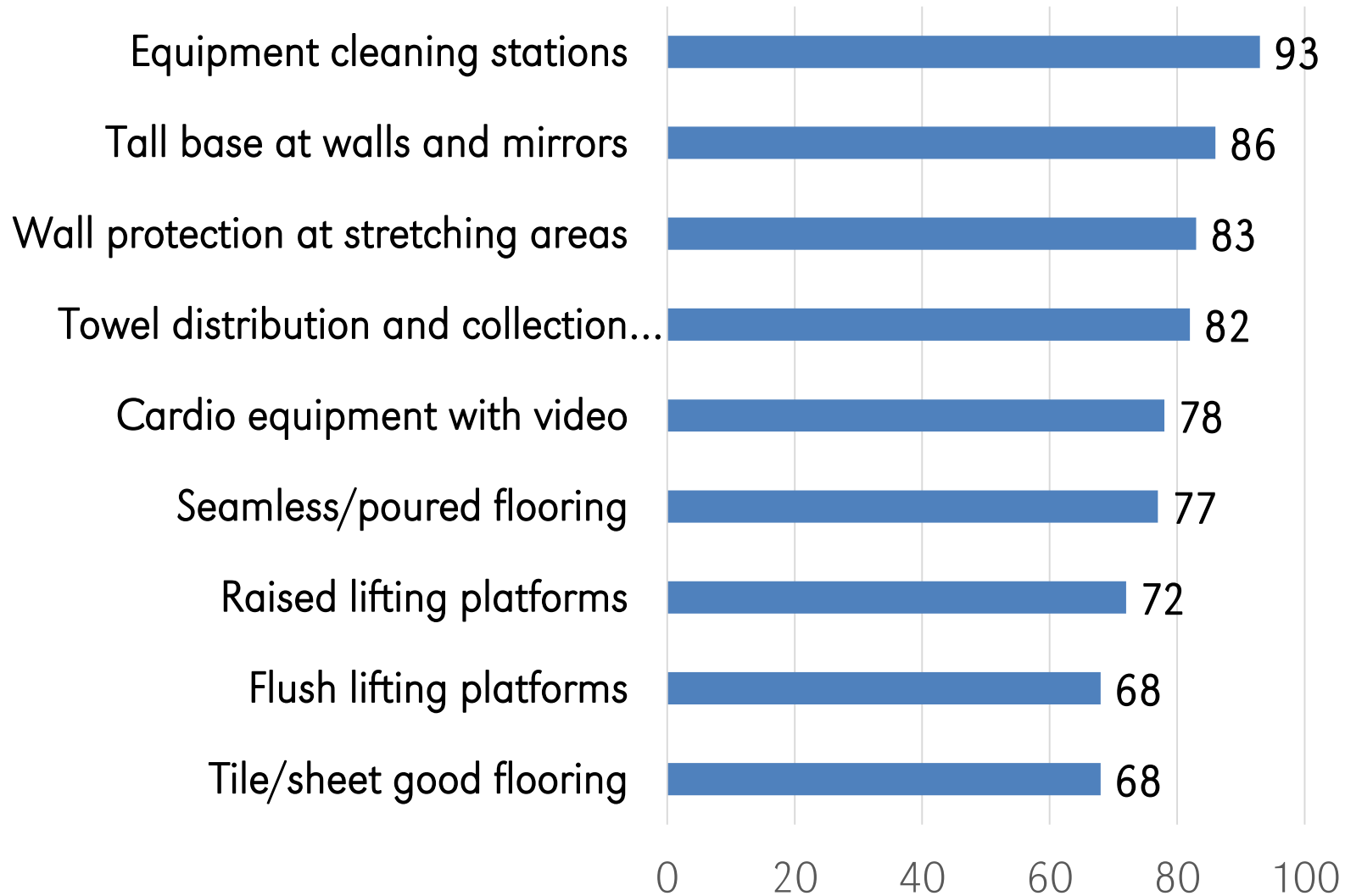
AV SYSTEMS



MIRROR/WALL PROTECTION \$9/SF



FITNESS/WEIGHT ROOMS

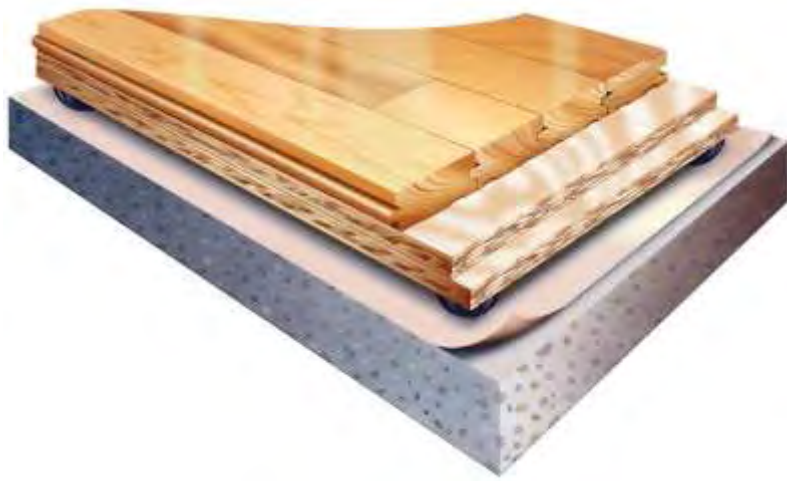


MULTI-PURPOSE GYM

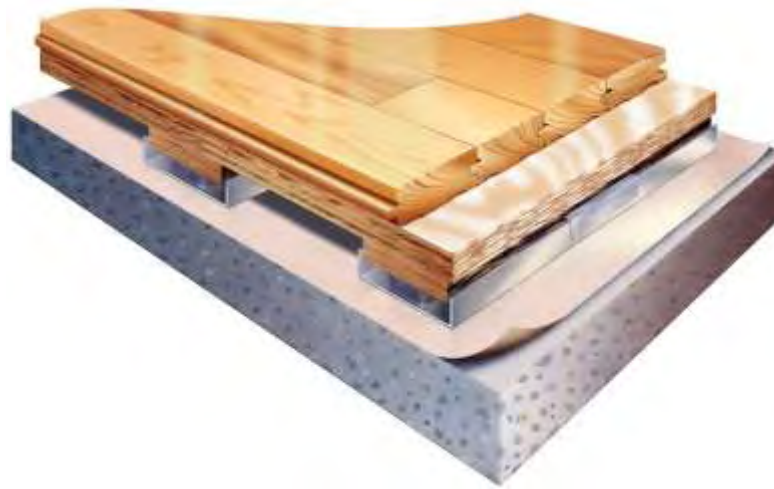
- FLOORING
- DIVIDER
CURTAINS
- WINDOW SHADES
- BB GOALS
- CONTROL PANEL
- ACOUSTICS
- SPECTATOR
SEATING



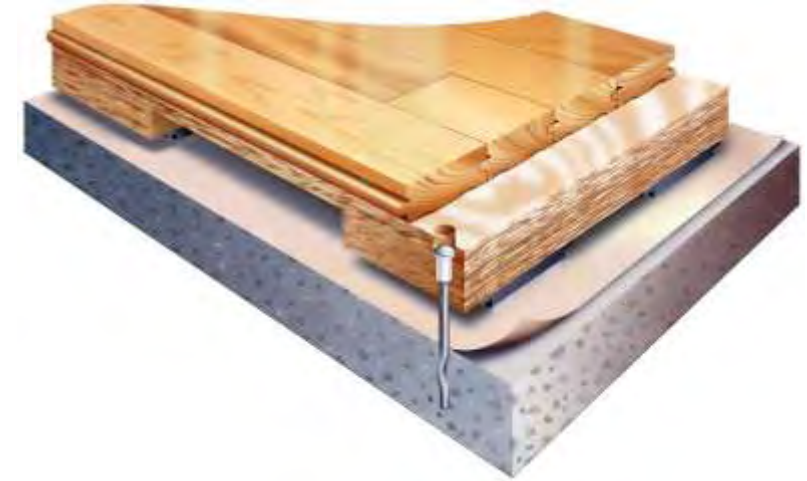
FLOORING – MULTI-PURPOSE GYM



FLOATING WOOD \$9/SF



ANCHORED CHANNEL \$12/SF

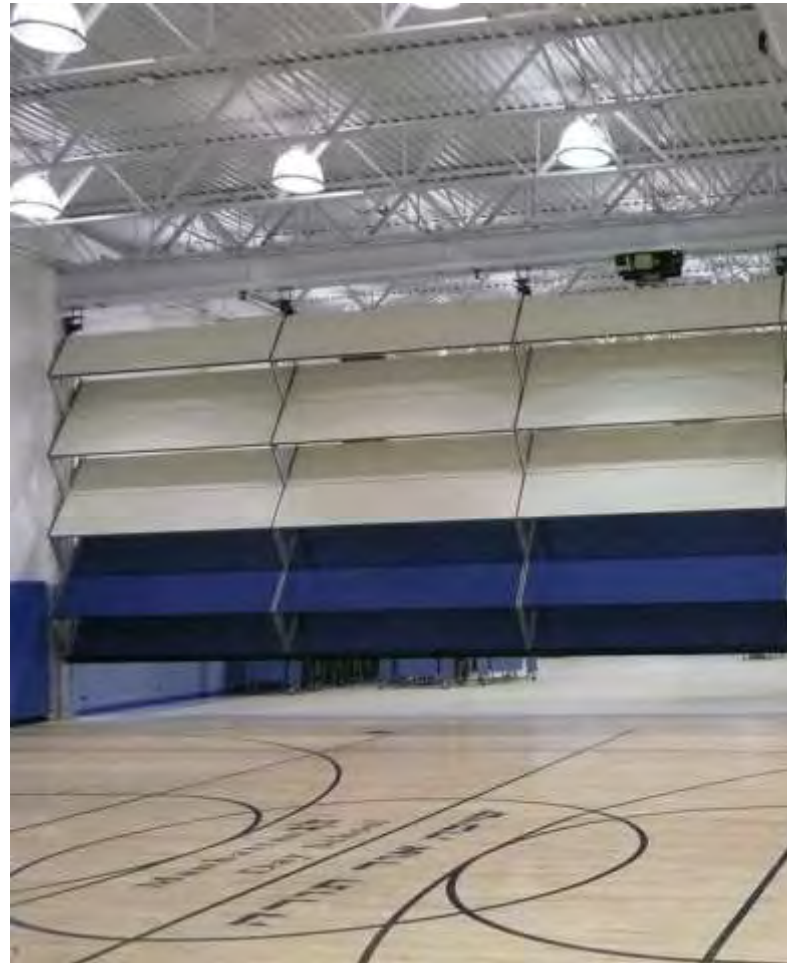


ANCHORED FLOATING \$12/SF

EQUIPMENT – MULTI-PURPOSE GYM



DIVIDER CURTAIN \$15,000



DIVIDER WALL \$300,000



WINDOW SHADES \$14-30/SF

EQUIPMENT – MULTI-PURPOSE GYM



OVERHEAD BB GOALS \$6,000

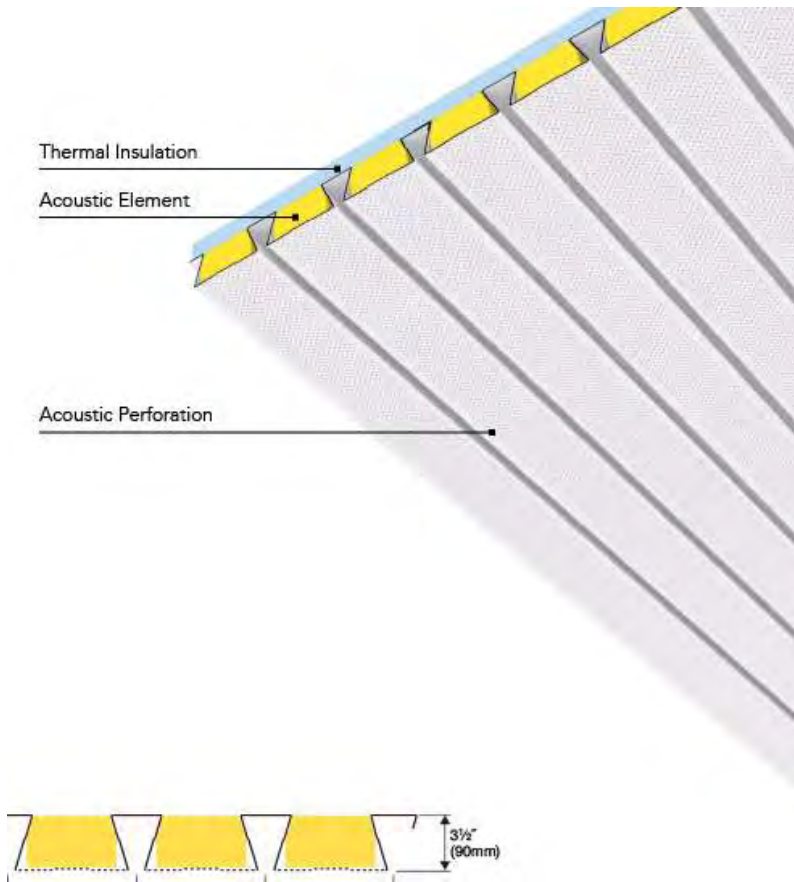


PORTABLE BB GOALS \$11,000



CONTROL PANEL \$1,800

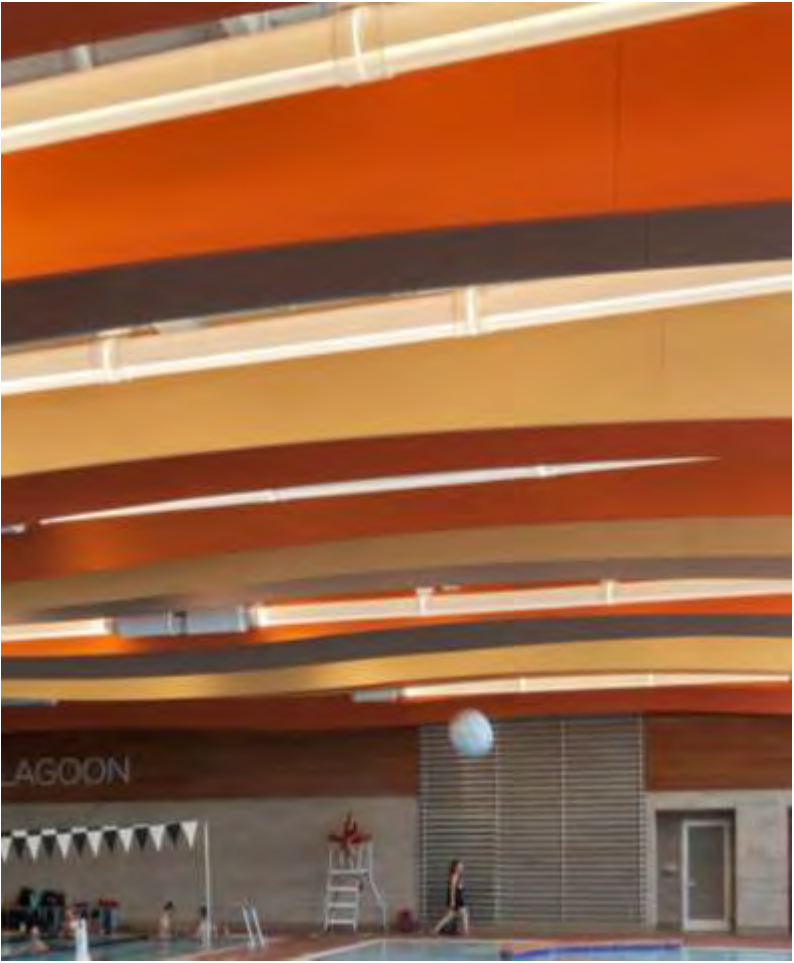
ACOUSTICS – MULTI-PURPOSE GYM



ACOUSTICAL DECK \$8/SF (+\$5)



ACOUSTICAL DECK



ACOUSTICAL PANELS \$14/SF

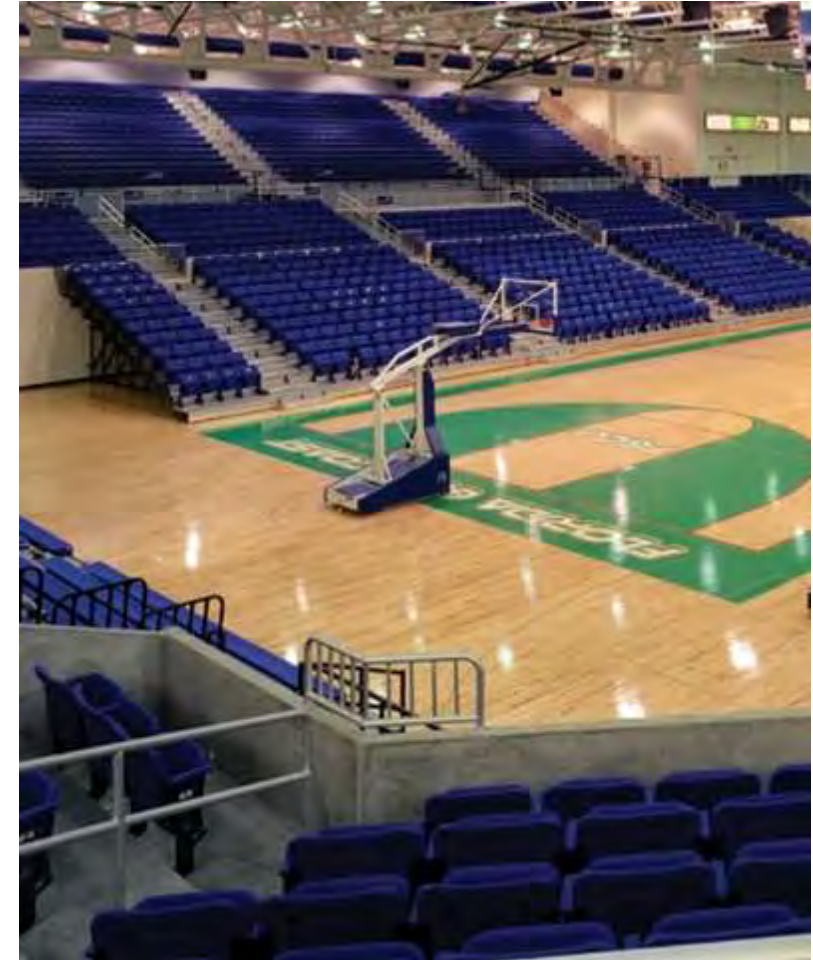
SPECTATOR SEATING



TIP AND ROLL \$40/SEAT



BLEACHERS \$160/SEAT



POP-UP SEATING \$350/SEAT

MAC GYM

- FLOORING

 - Interlocking tile

 - Synthetic

 - Wood

- DASHER BOARDS

- SOCCER GOALS

 - Padded back wall

 - Filler panels

- NETTING



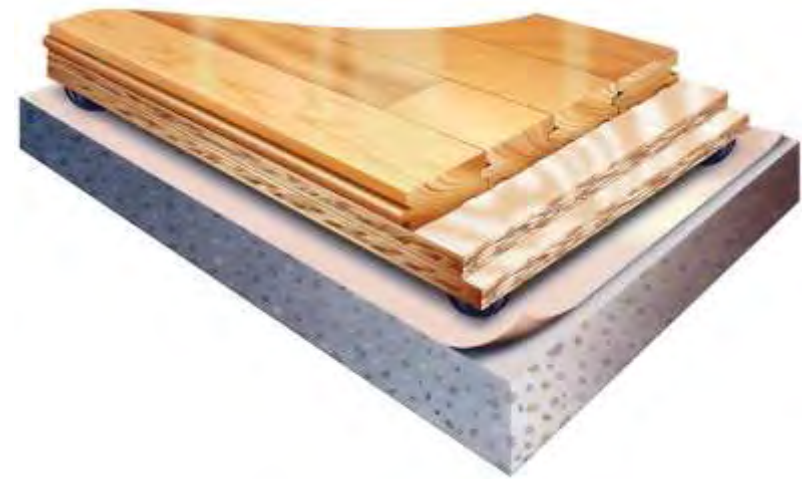
FLOORING – MAC GYM



INTERLOCKING TILE \$8/SF



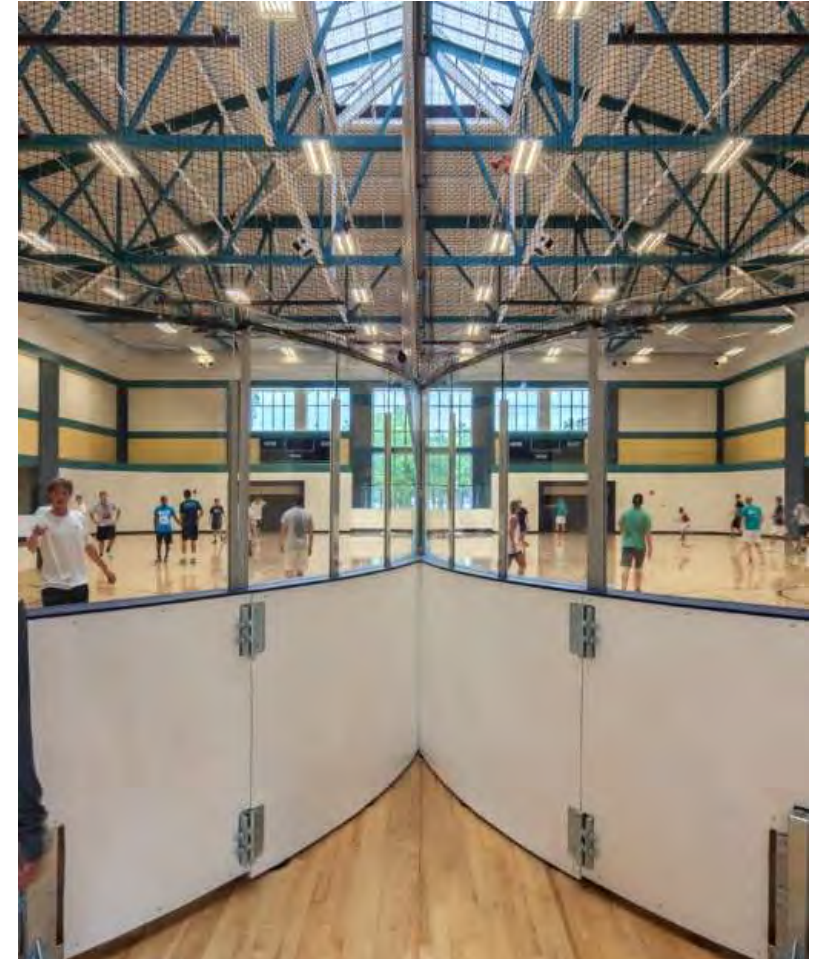
PAD & POUR \$12/SF



FLOATING WOOD \$9/SF

DASHER BOARDS – MAC GYM

- FIXED SYSTEM
 - Steel frame
 - Glass panels
- PORTABLE SYSTEM
 - Aluminum frame
 - Acrylic panels (over 4 feet high)
- FINISHED BACK PANELS
- \$200-500/LF

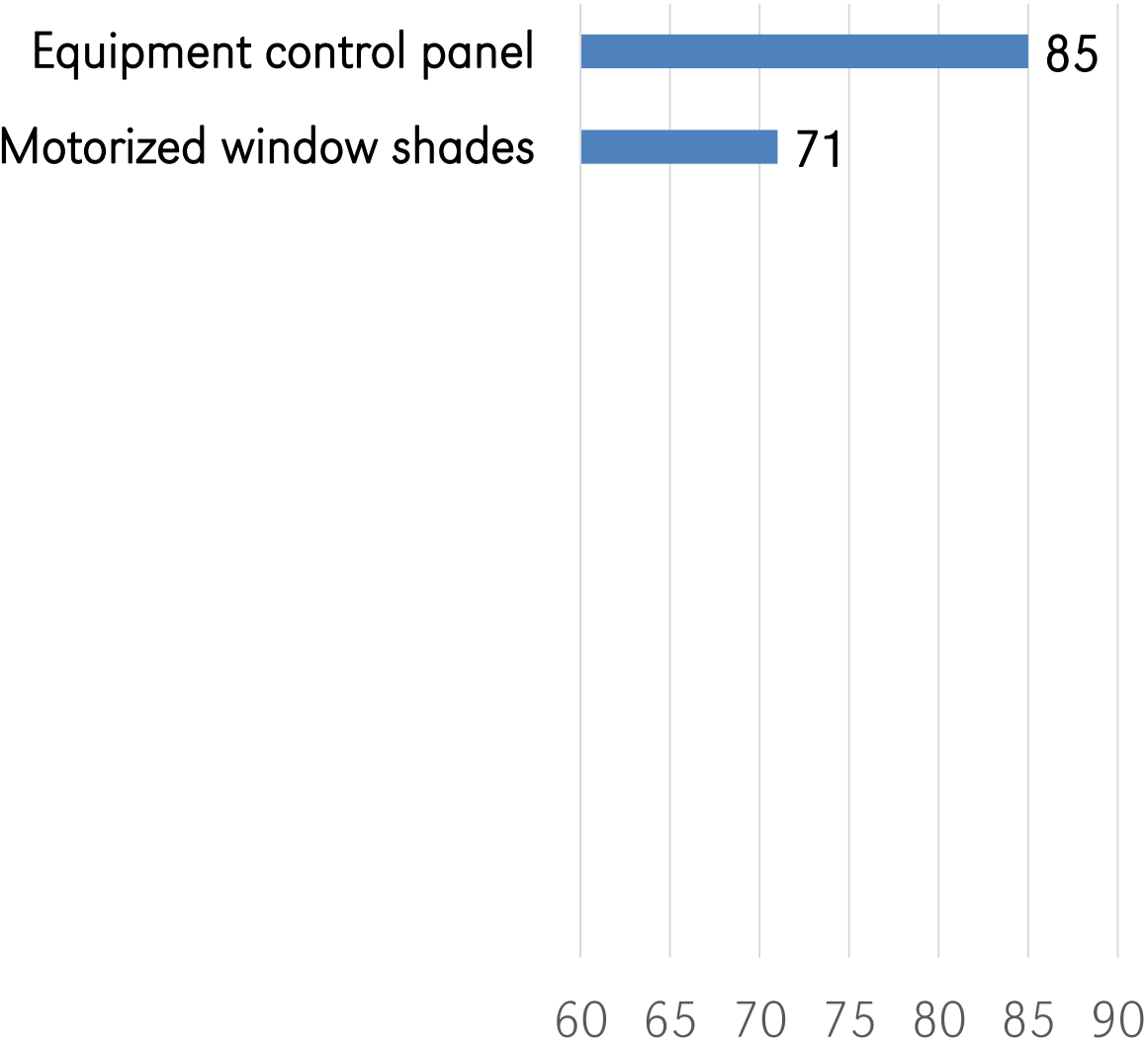


MAC GYM

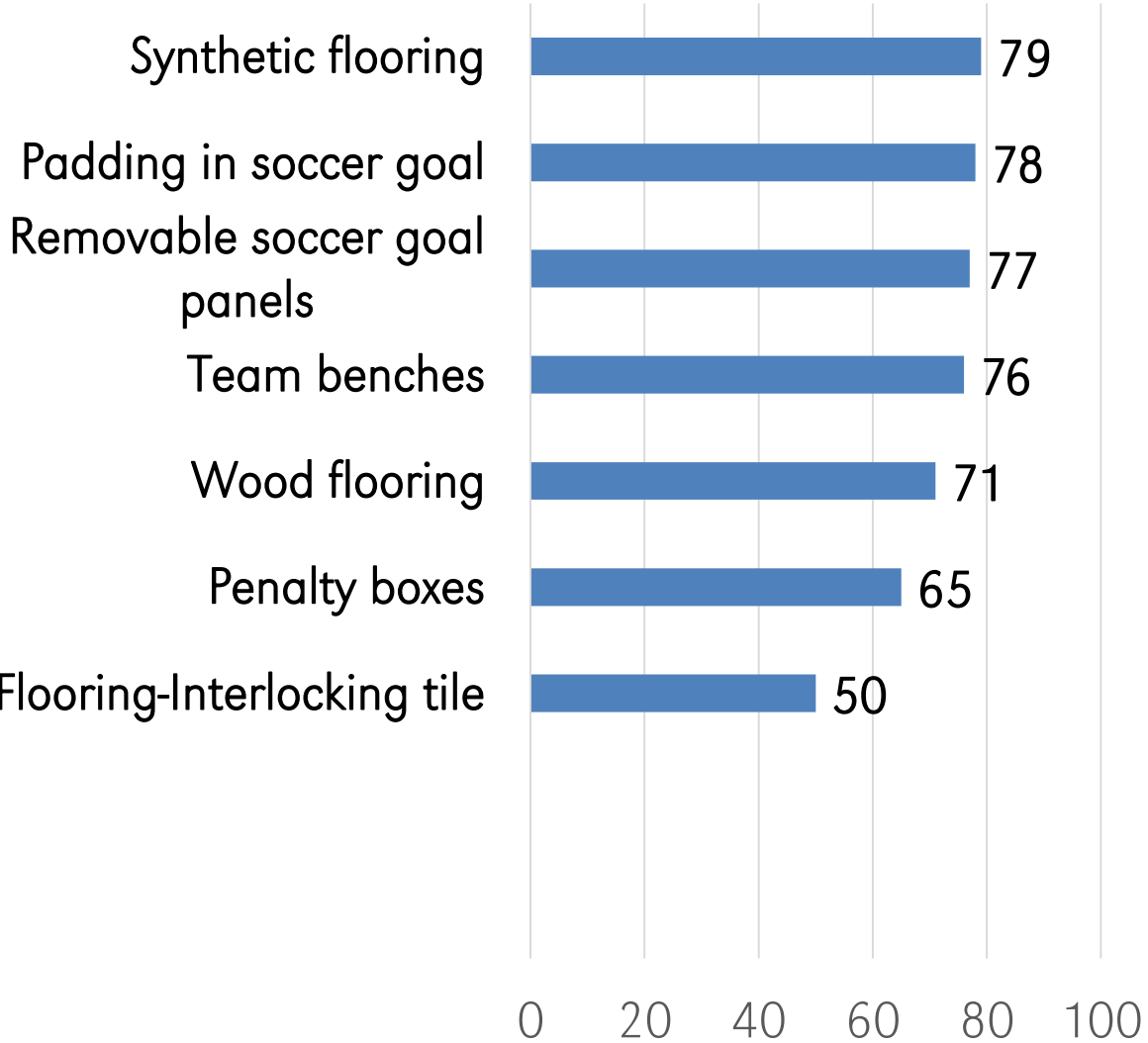
- FLOORING
 - Synthetic
 - Wood
- DASHER BOARDS
- SOCCER GOALS
 - Padded back wall
 - Filler panels
- NETTING



MULTI-PURPOSE GYM



MAC GYM



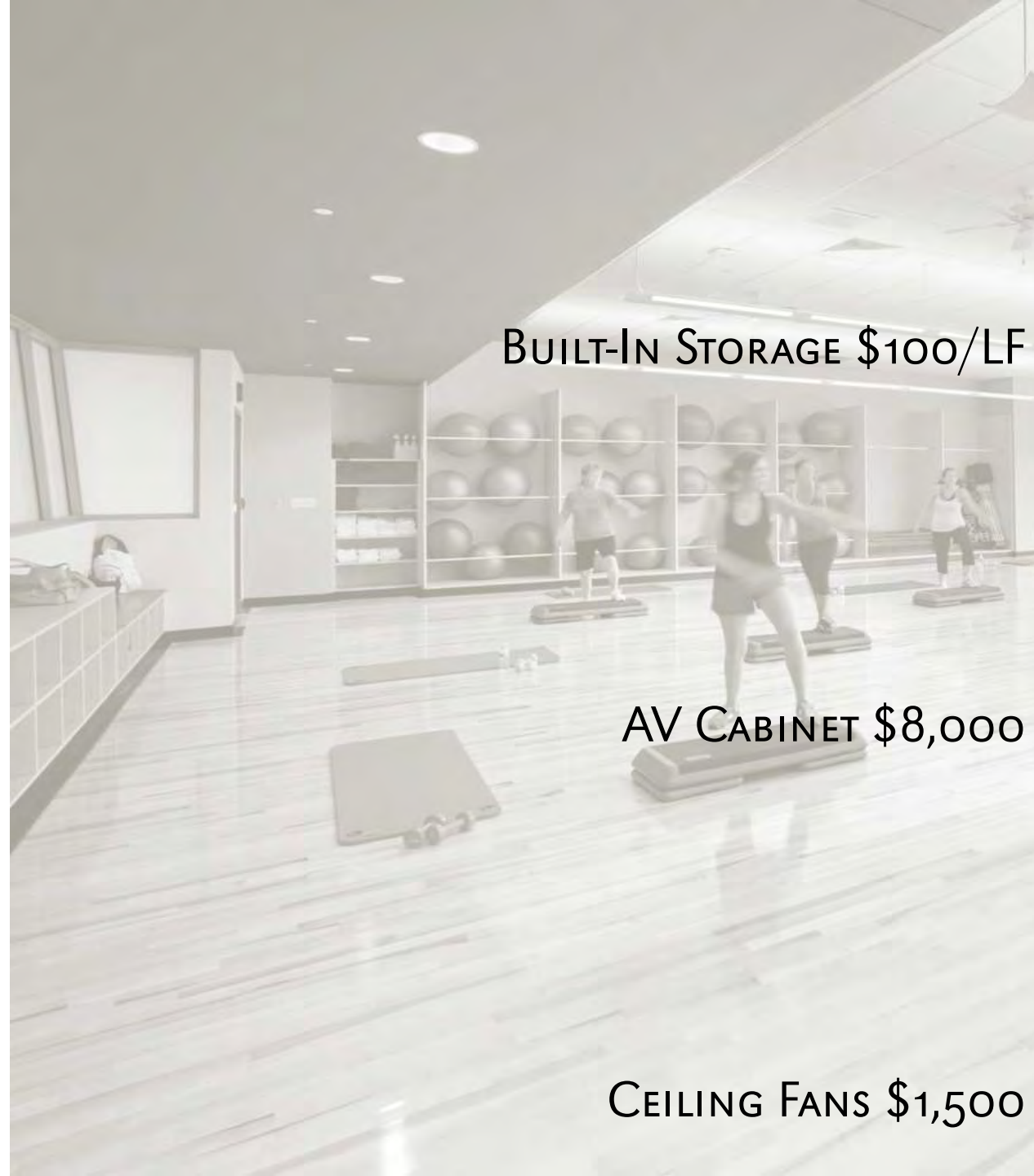
MULTI-PURPOSE SPACE

- STORAGE
- AV EQUIPMENT
- CEILING FANS
- FLOORING
- PRIVACY
- EQUIPMENT
- DANCE BARS
- DIMMABLE LIGHT
- DIVIDER WALLS



MULTI-PURPOSE SPACE

- STORAGE
- AV EQUIPMENT
- CEILING FANS
- FLOORING
- PRIVACY
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BUILT-IN STORAGE \$100/LF

AV CABINET \$8,000

CEILING FANS \$1,500



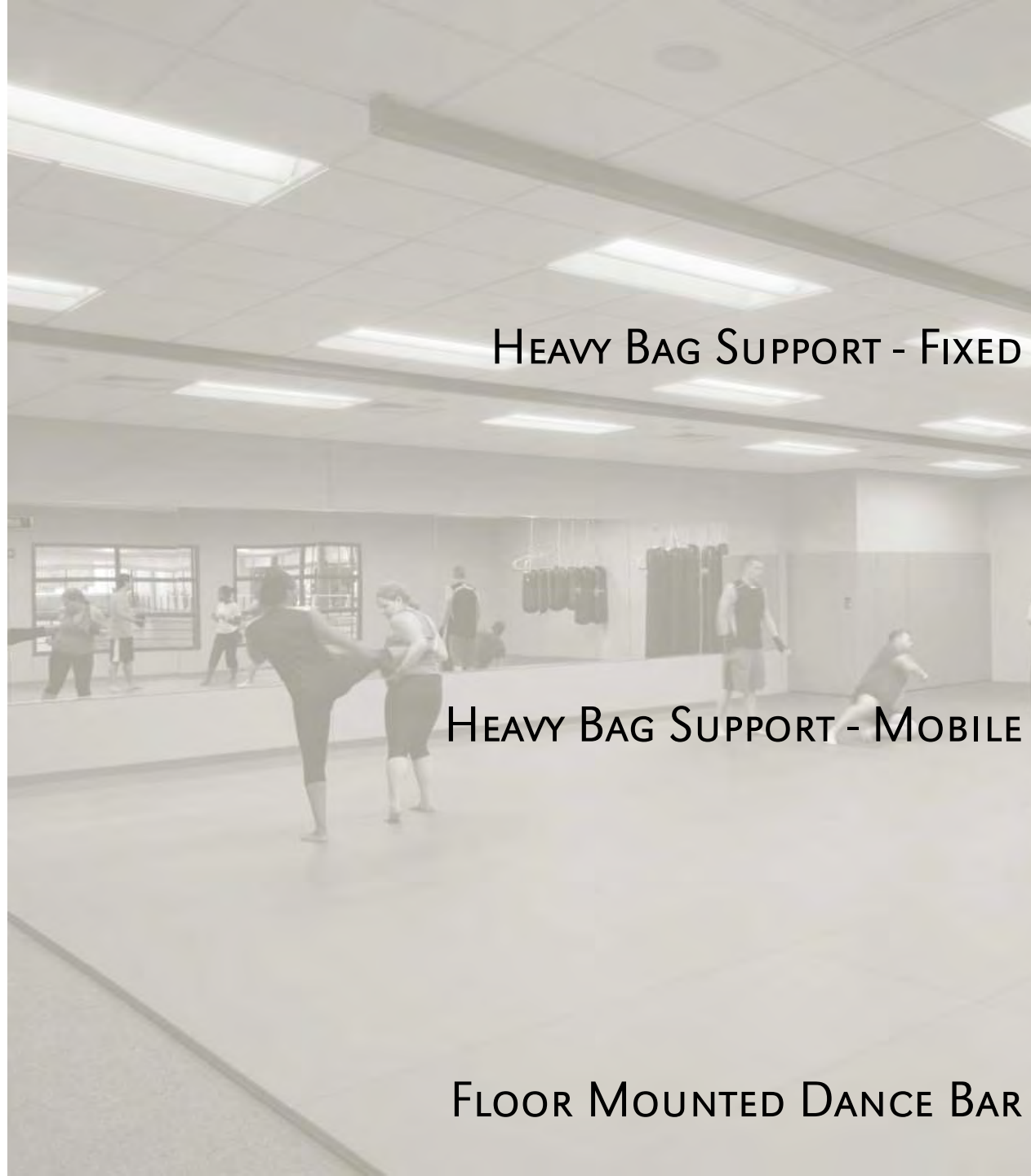
MULTI-PURPOSE SPACE

- STORAGE
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- CEILING FANS
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MULTI-PURPOSE SPACE

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- CEILING FANS
- FLOORING
- PRIVACY
- **EQUIPMENT**
- **DANCE BARS**
- DIMMABLE LIGHT
- DIVIDER WALLS



HEAVY BAG SUPPORT - FIXED

HEAVY BAG SUPPORT - MOBILE

FLOOR MOUNTED DANCE BAR



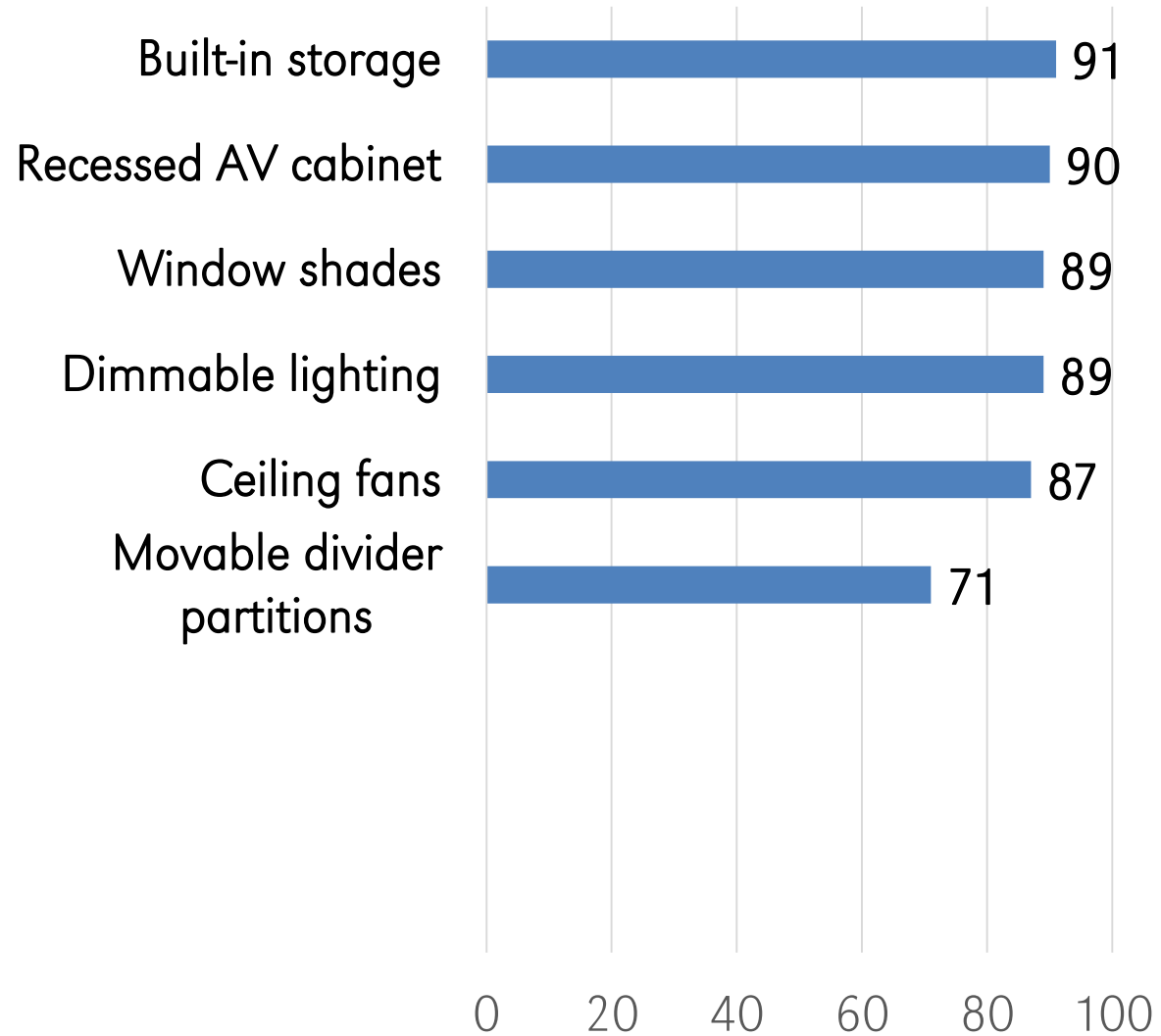
MULTI-PURPOSE SPACE

- STORAGE
- AV EQUIPMENT
- CEILING FANS
- FLOORING
- PRIVACY
- EQUIPMENT
- DANCE BARS
- DIMMABLE LIGHT
- DIVIDER WALLS

\$60/SF



MULTI-PURPOSE ROOMS



JOGGING TRACK

- **CONFIGURATION**

- Length

- Slope

- Views

- **FLOOR FINISH**

- **STRUCTURE**

- Cantilevered

- Suspended

- **CARDIO ALCOVES**



JOGGING TRACK

- **CONFIGURATION**

- Length

- Slope

- Views

- **FLOOR FINISH**

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JOGGING TRACK

- CONFIGURATION

 - Length

 - Slope

 - Views

- FLOOR FINISH

- STRUCTURE

 - Cantilevered

 - Suspended

- CARDIO ALCOVES



FLOOR FINISH – TRACKS



POURED URETHANE \$11/SF



PAD & POUR \$12/SF



ROLLED RUBBER \$13/SF

JOGGING TRACK

- CONFIGURATION

Length

Slope

Views

- FLOOR FINISH

- **STRUCTURE**

Suspended

\$55/SF

- CARDIO ALCOVES



JOGGING TRACK

- CONFIGURATION

- Length

- Slope

- Views

- FLOOR FINISH

- STRUCTURE

- Cantilevered

- \$65/SF

- CARDIO ALCOVES



JOGGING TRACK

- CONFIGURATION

 - Length

 - Slope

 - Views

- FLOOR FINISH

- STRUCTURE

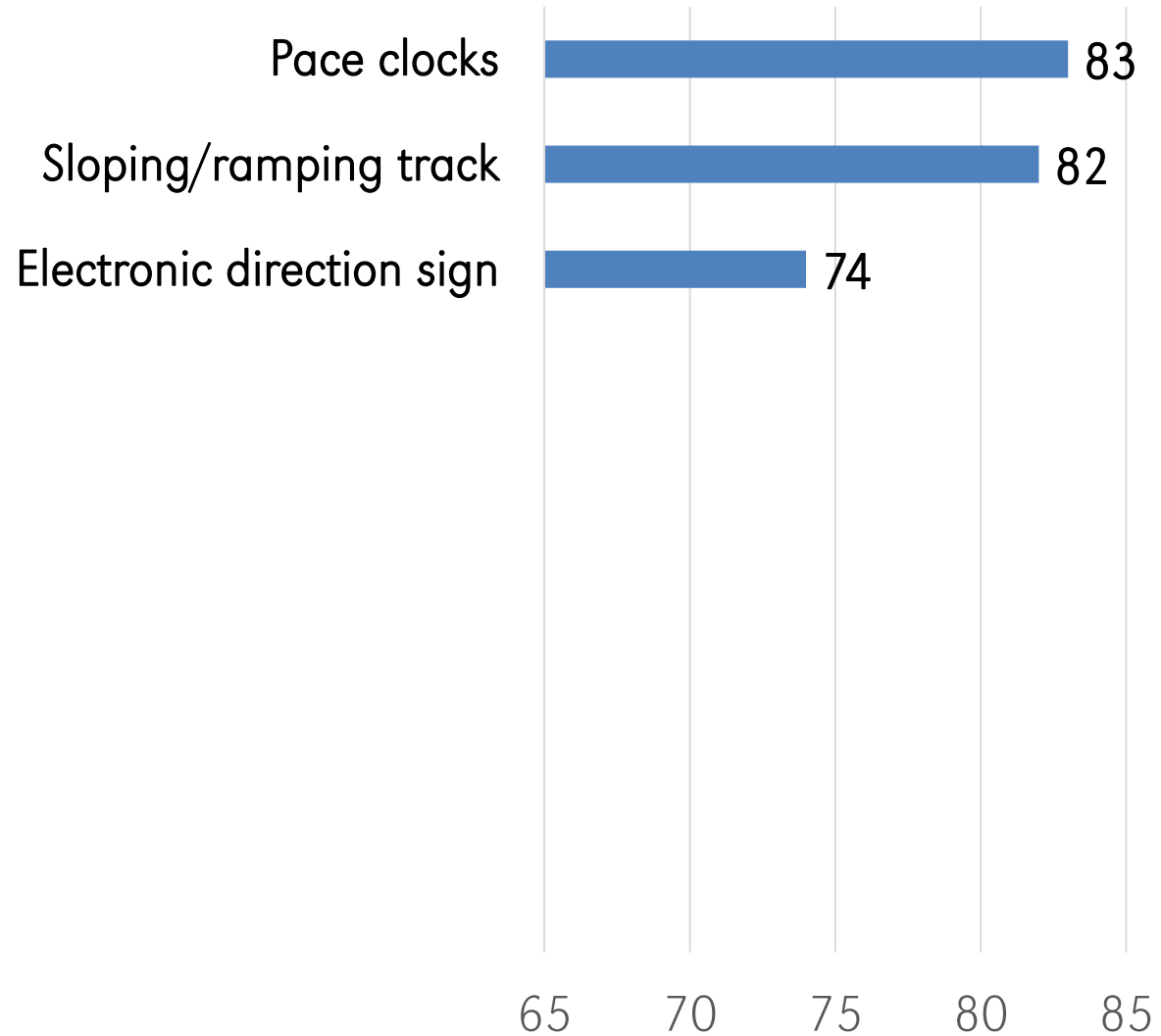
 - Cantilevered

 - Suspended

- **CARDIO ALCOVES**



JOGGING TRACK



LEISURE POOLS

- **FEATURES**

- Seating

- Current channels

- Bubble bench

- **AV SYSTEMS**

- **LIGHTING**

- **LANDSCAPING**

- **ACOUSTICS**

- **WHIRLPOOL/SPA**



LEISURE POOLS

- FEATURES

 - Seating

 - Current channels

 - Bubble bench

- AV SYSTEMS

- LIGHTING

- LANDSCAPING

- **ACOUSTICS**

- WHIRLPOOL/SPA



LEISURE POOLS

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- LANDSCAPING

- ACOUSTICS

- WHIRLPOOL/SPA

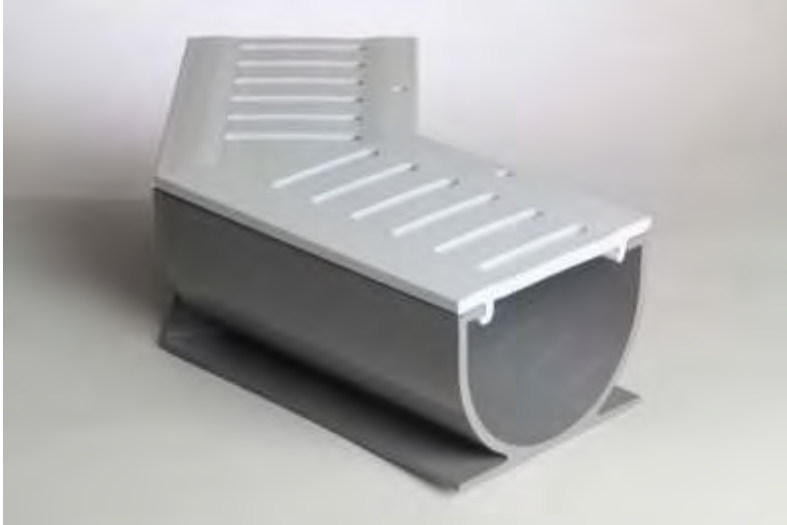


LAP POOLS

- DECK DRAINS
- GUTTER DESIGN
- ACOUSTICS
- LIGHT FIXTURE ACCESS
- AIR CIRCULATION
- SPECTATORS
- SIGHT LINES
- STAINLESS STEEL
- DAYLIGHT



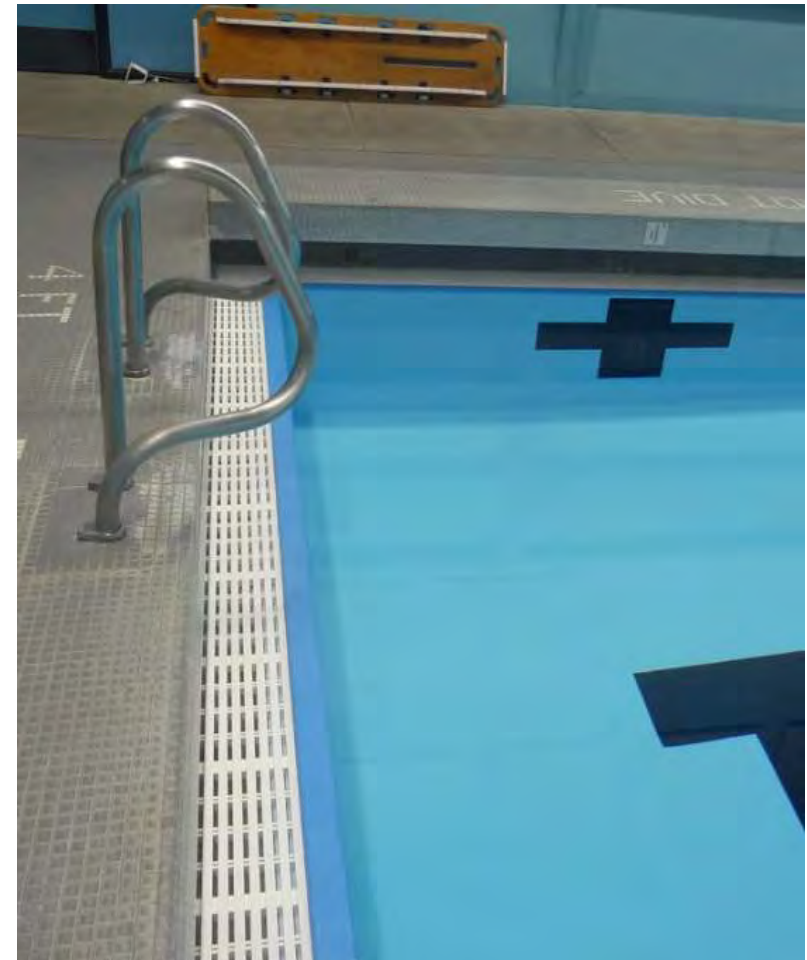
LAP POOLS



DECK DRAIN



FLUSH GUTTER



RECESSED GUTTER

LAP POOLS

- DECK DRAINS
- GUTTER DESIGN
- ACOUSTICS
- LIGHT FIXTURE ACCESS
- AIR CIRCULATION
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- SIGHT LINES
- STAINLESS STEEL
- DAYLIGHT

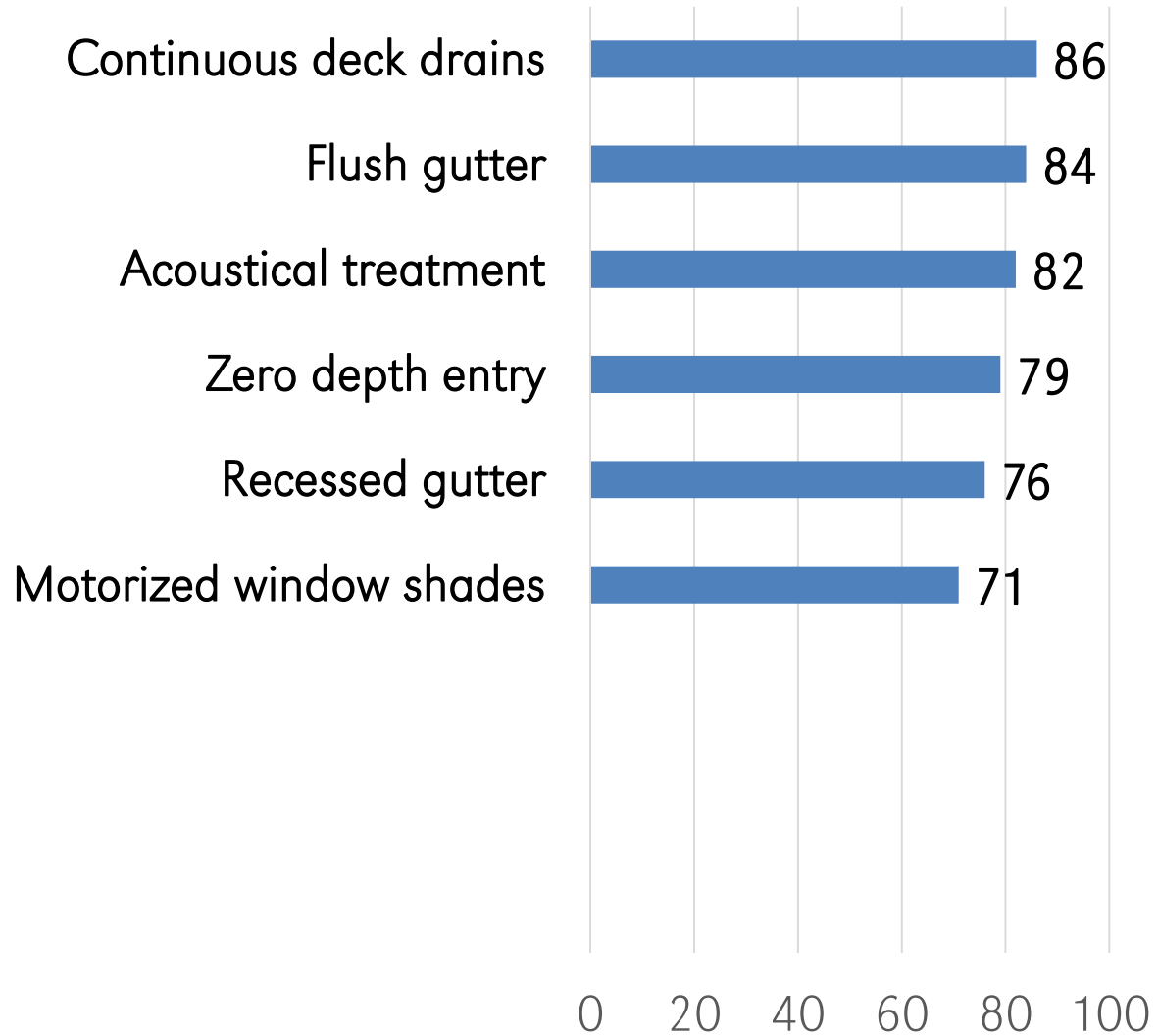


LAP POOLS

- DECK DRAINS
- GUTTER DESIGN
- ACOUSTICS
- LIGHT FIXTURE ACCESS
- AIR CIRCULATION
- SPECTATORS
- SIGHT LINES
- STAINLESS STEEL
- DAYLIGHT



Pools



MEETING SPACE, CLASSROOMS

- **LIGHT CONTROL**

 - Dimmable

 - Teaching wall

 - Daylight

- **AUDIO VISUAL**

 - Projection screen

 - White board

- **DIVIDER WALLS**

- **FLEXIBLE
FURNITURE**



MEETING SPACE, CLASSROOMS

- **LIGHT CONTROL**

- Dimmable

- Teaching wall

- Daylight

- **AUDIO VISUAL**

- Projection screen

- White board

- **DIVIDER WALLS**

- **FLEXIBLE
FURNITURE**



MEETING SPACE, CLASSROOMS

- LIGHT CONTROL

 - Dimmable

 - Teaching wall

 - Daylight

- AUDIO VISUAL

 - Projection screen

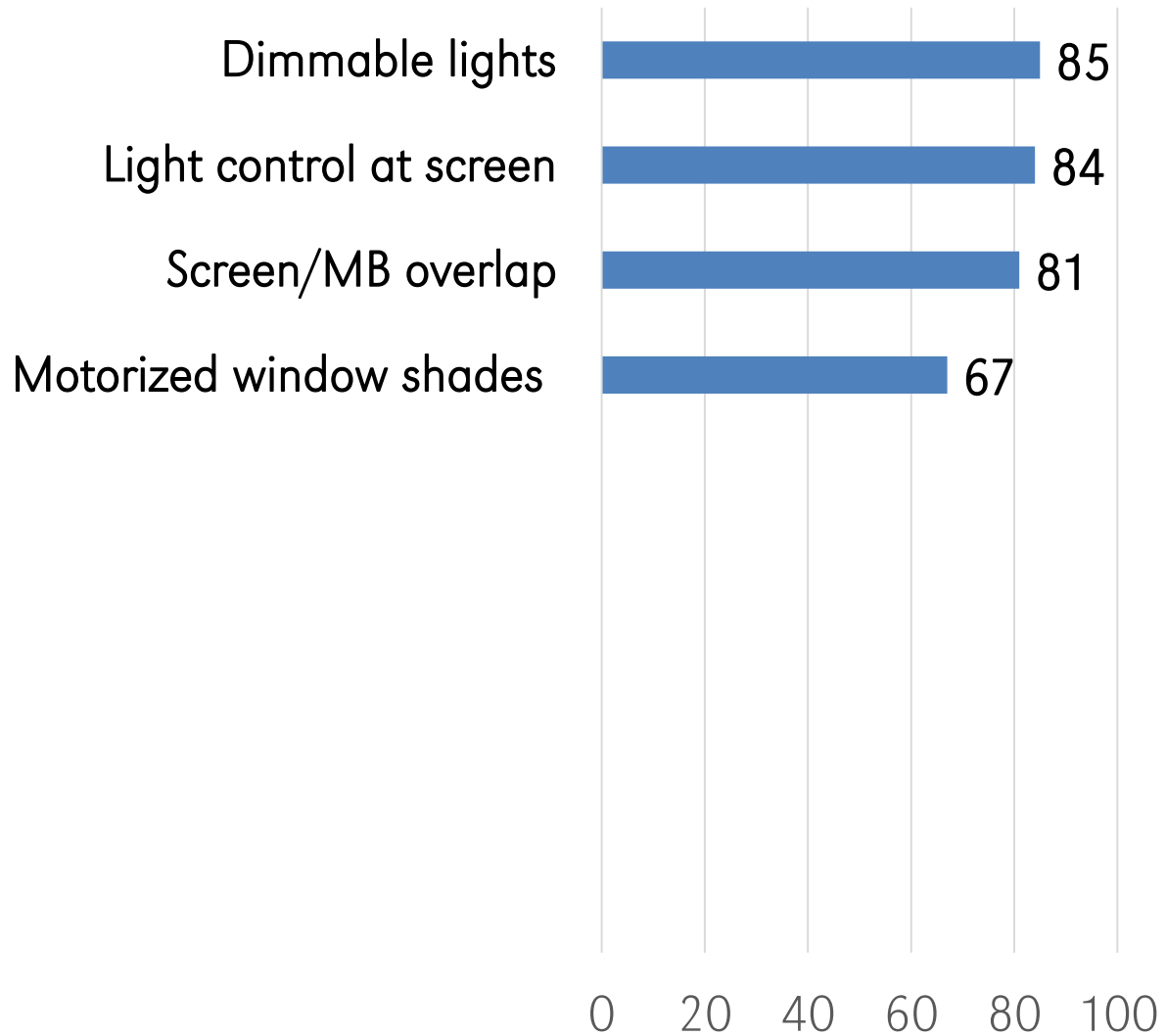
 - White board

- DIVIDER WALLS

- FLEXIBLE
FURNITURE



MEETING SPACE, CLASSROOMS



OFFICES

- DAYLIGHT
- ACOUSTICAL
PRIVACY
- VISION GLASS



OFFICES

- DAYLIGHT
- ACOUSTICAL
PRIVACY
- VISION GLASS

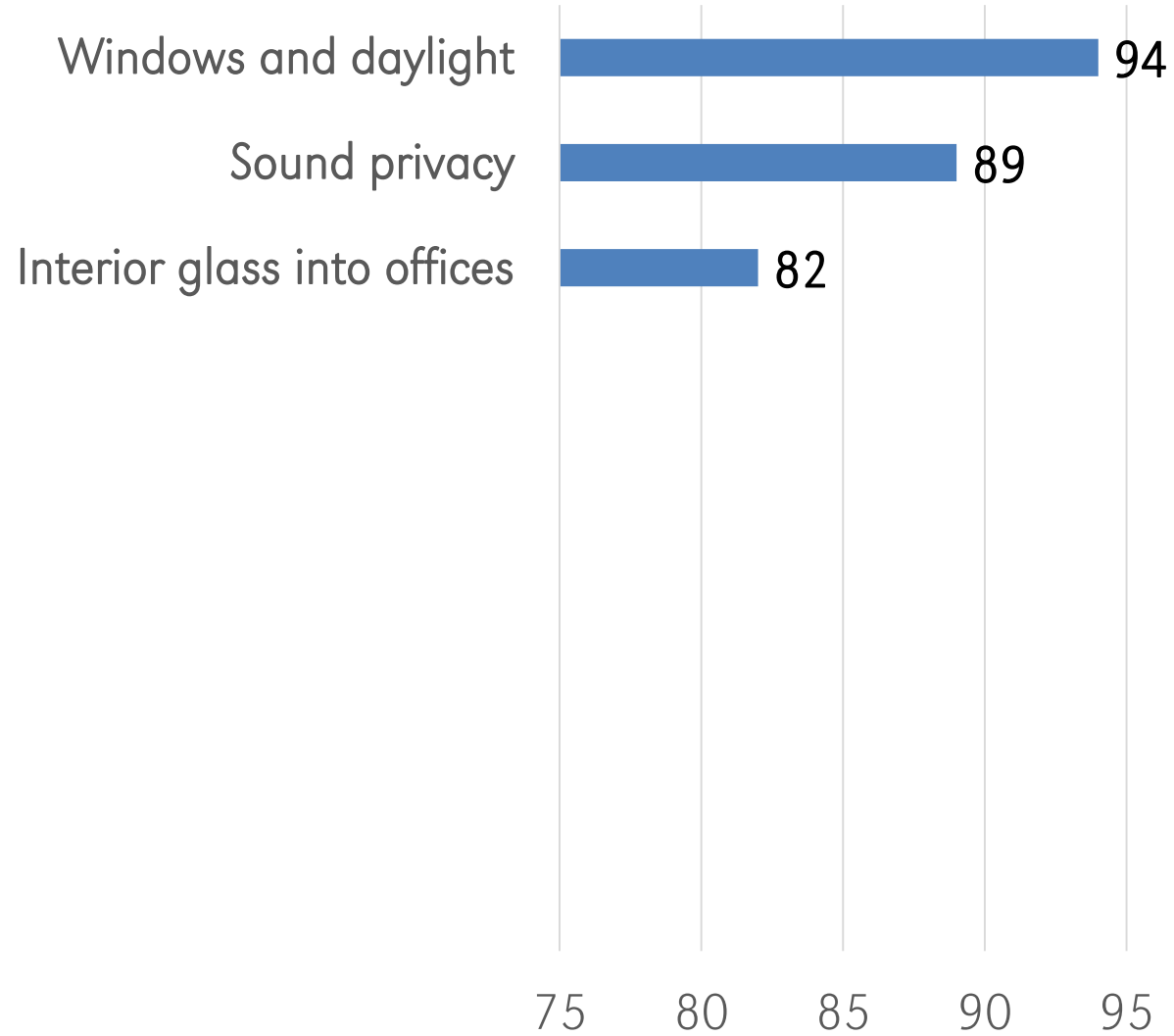


OFFICES

- DAYLIGHT
- ACOUSTICAL
PRIVACY
- VISION GLASS



OFFICES



LOCKERS, TOILETS, SHOWER

- LOCKERS

 - Material

 - Configuration

 - Bench

 - Locks

- FLOOR FINISH

- HANDS-FREE

 - PLUMBING

- HAND DRYERS

- SOLID SURFACE
COUNTERS



LOCKER TYPES



METAL \$375/UNIT



PHENOLIC \$670/UNIT



WOOD \$900/UNIT

LOCKERS, TOILETS, SHOWER

- LOCKERS

 - Material

 - Configuration

 - Bench

 - Locks

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LOCKERS, TOILETS, SHOWER

- LOCKERS

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COUNTERS



LOCKS



REMOVABLE



KEYED OR COMBINATION \$75



DIGITAL \$150-300

FLOORING – LOCKER ROOMS



SEALED CONCRETE – \$1/SF



CARPETING – \$4/SF



CERAMIC TILE – \$10/SF

EQUIPMENT – LOCKER ROOMS



HAND DRYERS – \$1,000

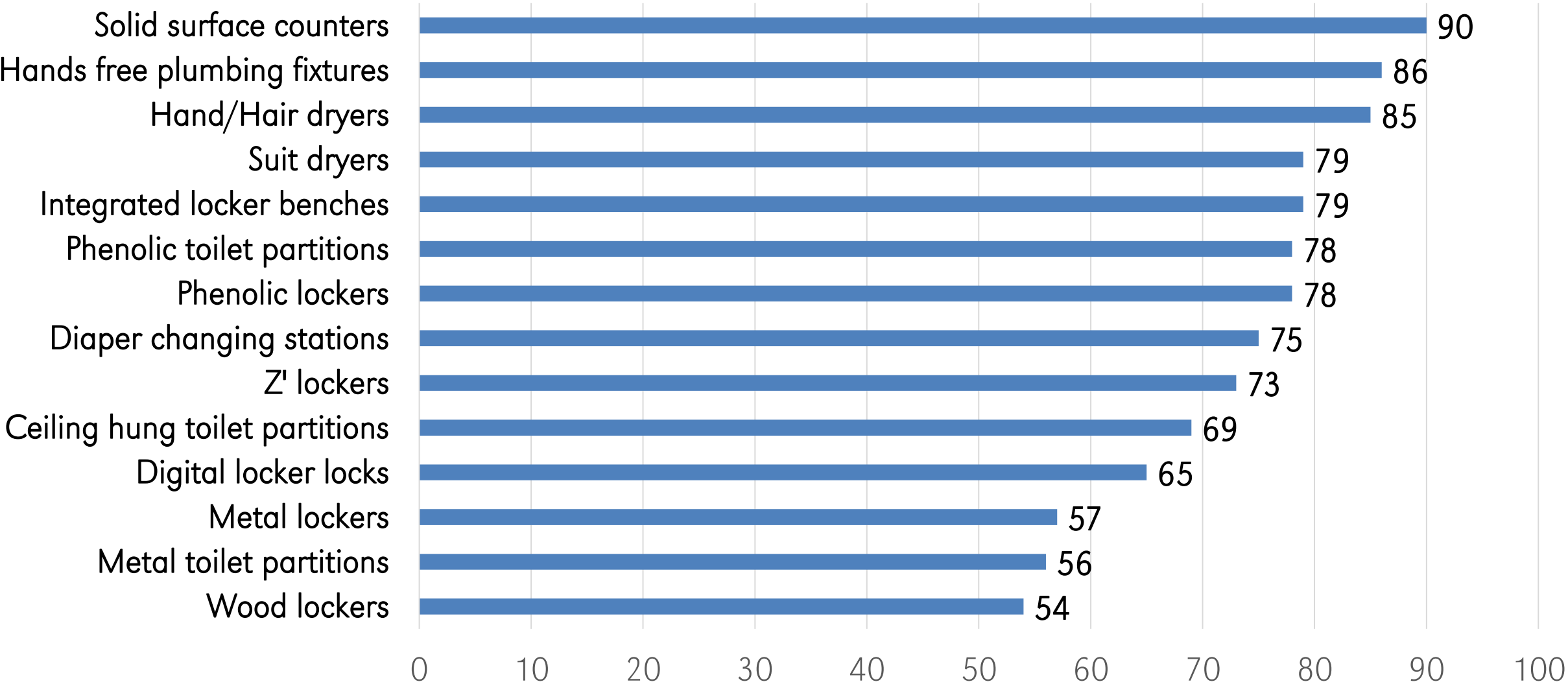


SUIT EXTRACTOR– \$2,000



HANDS-FREE FIXTURES +\$100

LOCKERS, TOILETS, SHOWERS



CLIMBING WALL

- LOCATION
- RECESSED FLOORING
- WALL MATERIAL
- INTEGRATED STORAGE
- SPECIALTY LIGHTING



CLIMBING WALL

- LOCATION
- RECESSED FLOORING
- **WALL MATERIAL**
 - Flat \$100/SF
 - Natural \$150/SF
- INTEGRATED STORAGE
- SPECIALTY LIGHTING



CLIMBING WALL

- LOCATION
- RECESSED FLOORING
- WALL MATERIAL
- INTEGRATED STORAGE
- SPECIALTY LIGHTING



CLIMBING WALL

- LOCATION
- RECESSED FLOORING
- WALL MATERIAL
- INTEGRATED STORAGE
- **SPECIALTY LIGHTING**



CLIMBING WALL

- LOCATION
- RECESSED FLOORING
- WALL MATERIAL
- INTEGRATED STORAGE
- **SPECIALTY LIGHTING**



CLIMBING WALL

- LOCATION
- RECESSED FLOORING
- WALL MATERIAL
- INTEGRATED STORAGE
- **SPECIALTY LIGHTING**



CLIMBING WALL

- LOCATION
- RECESSED FLOORING
- WALL MATERIAL
- INTEGRATED STORAGE
- SPECIALTY LIGHTING



OUTDOOR PURSUITS

- FRONT/BACK OF HOUSE ACCESS
- FLOOR DRAINS
- CHAIN LINK DIVIDERS
- DRIVE THROUGH OUTDOOR ACCESS



OUTDOOR PURSUITS

- FRONT/BACK OF HOUSE ACCESS
- **FLOOR DRAINS**
- CHAIN LINK DIVIDERS
- DRIVE THROUGH OUTDOOR ACCESS



OUTDOOR PURSUITS

- FRONT/BACK OF HOUSE ACCESS
- FLOOR DRAINS
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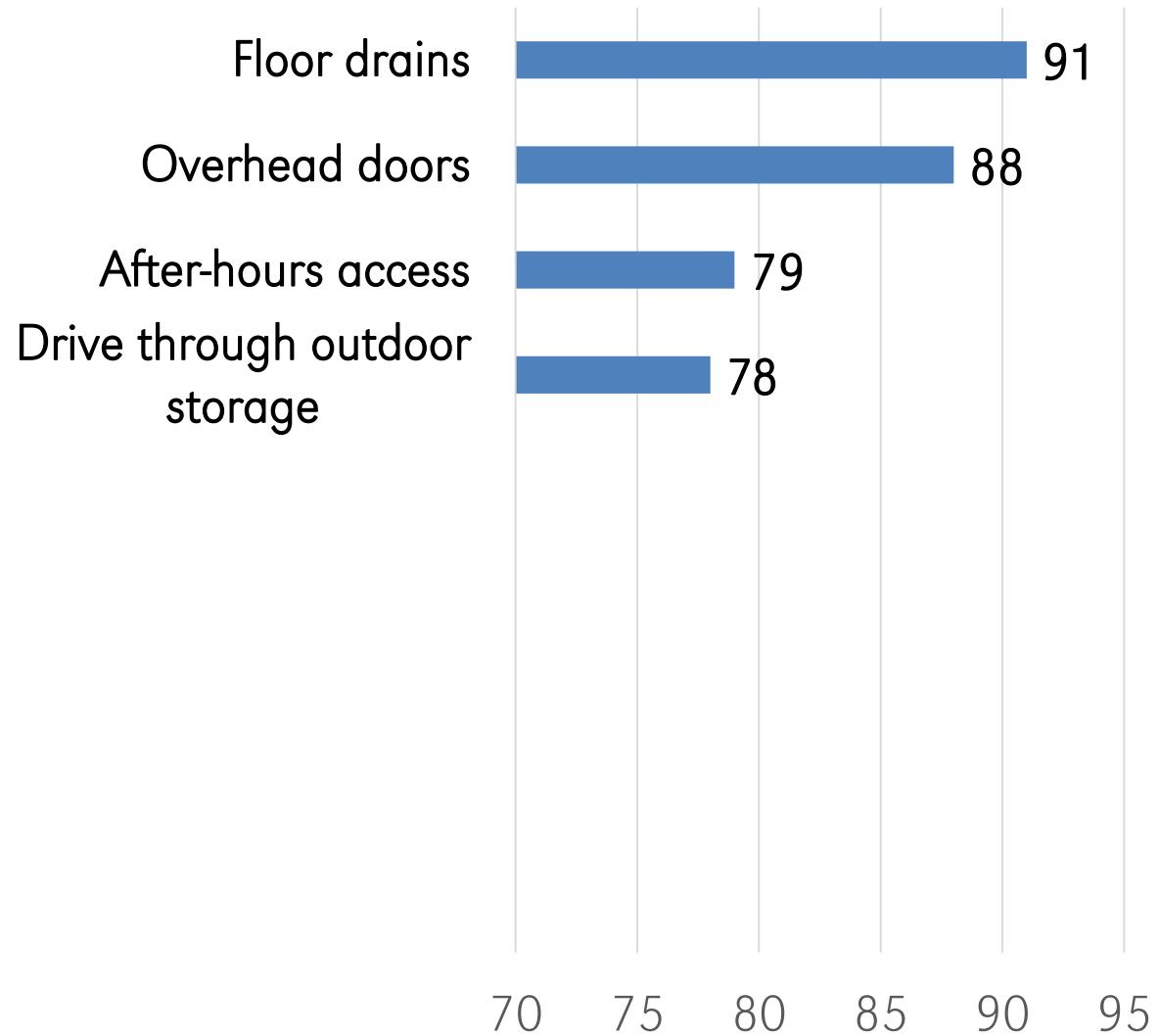


OUTDOOR PURSUITS

- FRONT/BACK OF HOUSE ACCESS
- FLOOR DRAINS
- CHAIN LINK STORAGE
- **DRIVE THROUGH
OUTDOOR ACCESS**



OUTDOOR PURSUITS



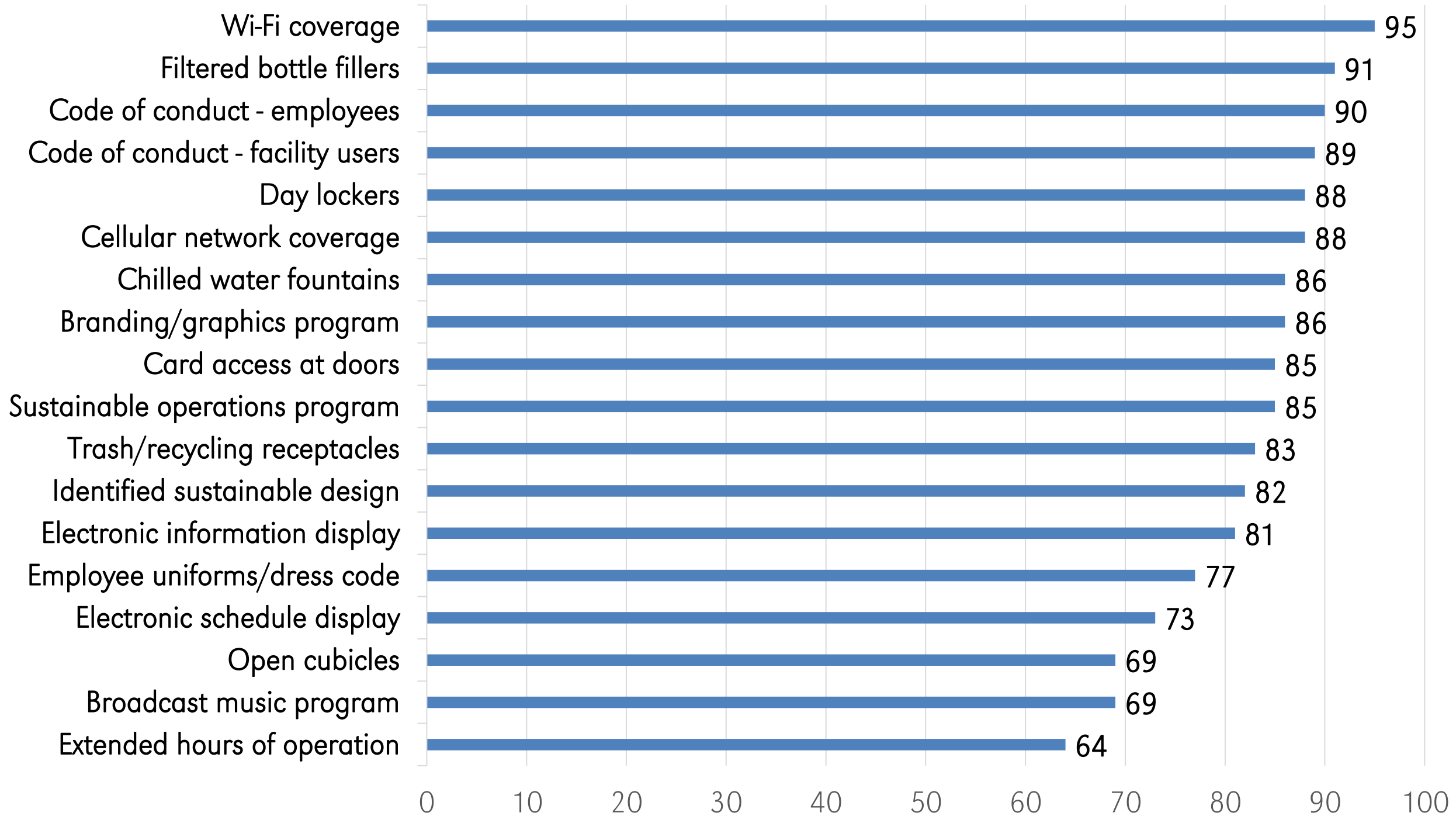
SIGNAGE

- FACILITY IDENTITY
- BRANDING
- WAY FINDING
- ROOM ID
- DONOR
RECOGNITION



BRANDING, ROOM ID, DONOR RECOGNITION





FIXTURES, FURNISHINGS & EQUIPMENT

FFE	UNIT COST
FURNISHINGS	
LOUNGE	\$30/SF - \$34/SF
OFFICE	\$24/SF - \$28/SF
MEETING	\$28/SF - \$32/SF
EQUIPMENT	
FITNESS EQUIPMENT	\$45/SF - \$55/SF
GENERAL (BALLS, COVERS, IT, ETC.)	\$3/SF - \$4/SF

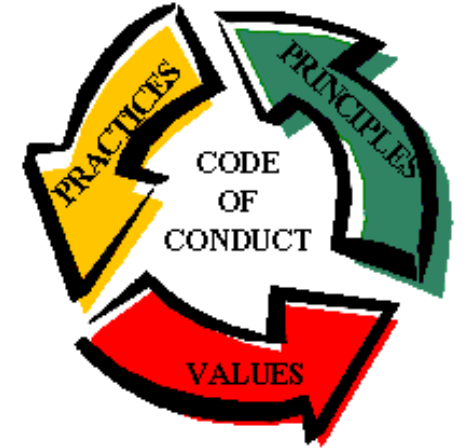


PART IV

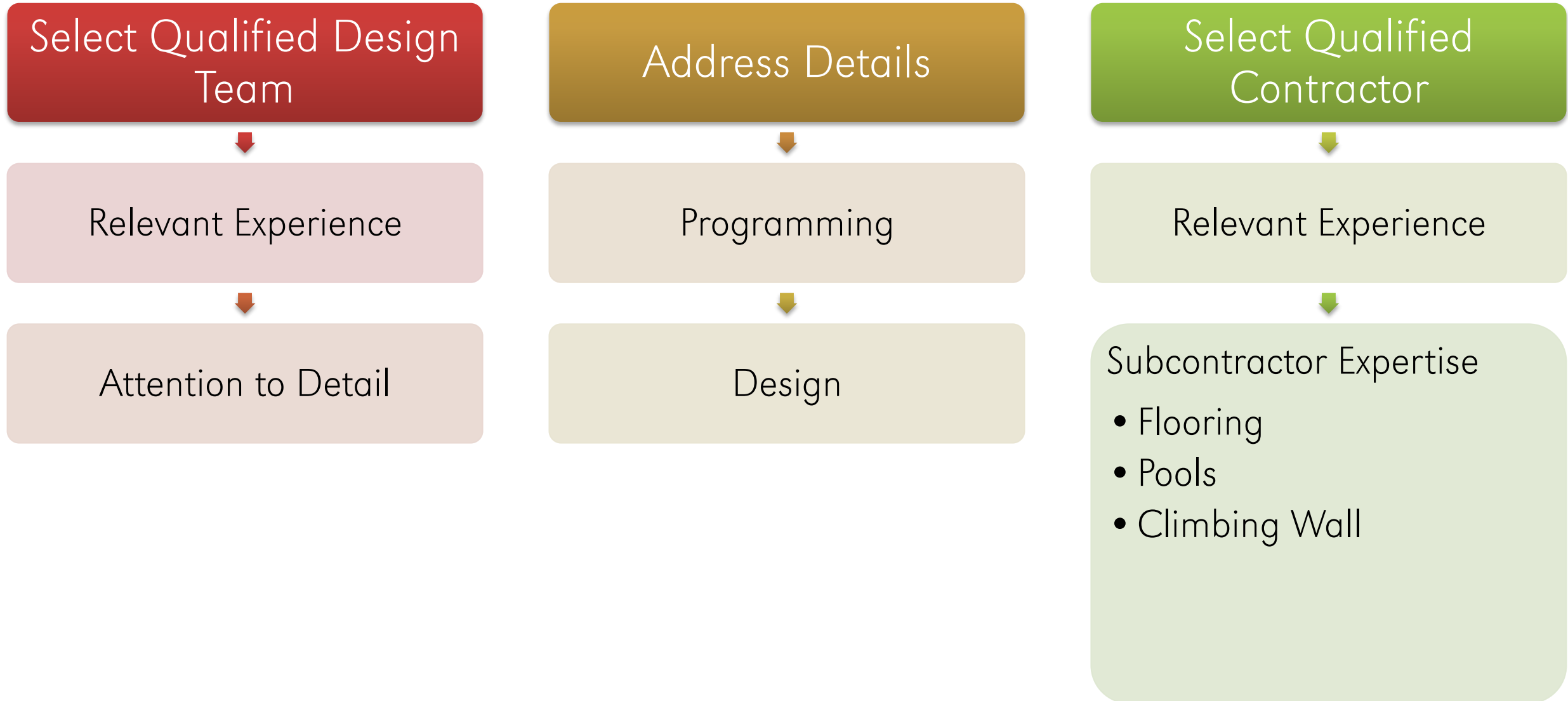
ACTION PLAN

OWNER CONTROLLED DETAILS

- WIFI COVERAGE
- CELLULAR NETWORK COVERAGE
- CODE OF CONDUCT
 - Users
 - Employees
- EMPLOYEE DRESS CODE
- OPERATIONS PLAN
 - Training program
 - Hours of operation
- MAINTENANCE BUDGET



ACTION PLAN – DESIGN/CONSTRUCTION



ACTION PLAN – OWNER

Fixtures, Furniture,
Equipment (FFE)



Select Qualified Professional



Coordinate With Building
Details

Operations Plan



Code of Conduct



Employee Dress Code



Integrate With Building
Design

Funding Plan



Maintenance



Operations



Upgrades

PART V

SUMMARY

SUMMARY

- Major impact of details
 - User experience
 - Appearance
 - Functionality
- Range in cost
- When to address
 - Programming
 - Design
- Responsible parties
 - Architect, Owner
 - Contractor



You SHOULD Now ...

- Understand the importance and cost impact of details in facility design
- Distinguish between Owner/Operator and Architect/Contractor responsibilities
- Develop an action plan to ensure that project details are adequately addressed



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