The Ultimate Door Guide for Commercial Facilities



Commercial facilities are comprised of a myriad of elements that require informed, thorough decision-making during initial construction or eventual renovation. From furniture to lighting to faucets to casework, those who design, build and maintain buildings have **countless options when choosing interior products and materials**.

Interior doors, though sometimes an overlooked component, can do more than just provide basic security and privacy. There are now doors available that can prevent injury in behavioral health areas, incorporate digital imagery and wayfinding as well as resist major damage.

Each facility has its own **door requirements** based on the **usage levels and types**. Some buildings have a lower volume of activity while others experience **high levels of foot traffic and object transport** (such as machines, equipment, carts, beds, etc.) between rooms. Oftentimes architects, designers, owners and managers are looking for the type of door that encapsulates the **right balance of durability and aesthetic options** necessary for their particular commercial building(s).

This book, *The Ultimate Guide for Commercial Facilities*, is a tool to be used when selecting doors for your establishment. Each page addresses a separate commercial door type, explaining its various aspects.

Door information includes:

- Definition of door type
- Most suitable environment(s)
- Attribute ranking

Each attribute is ranked out of five to show how strongly the door performs for each:

- Design Ability
- Short Term Affordability
- Durability
- Repair Ability
- Long Term Affordability

For questions about interior door selection for your commercial facility, contact Construction Specialties, Acrovyn[®] Doors division using the information below:

800.416.6586

acrovyndoors@c-sgroup.com www.c-sgroup.com/acrovyn-doors 3 Werner Way, Lebanon, NJ 08833

CS Acrovyn Doors were specifically designed with high impact/high traffic areas in mind, such as healthcare facilities. The doors are clad with Acrovyn[®], a name synonymous with protection for over 45 years, and feature rounded, replaceable stiles and edges for extra impact protection. The unique design extends the life and aesthetics of the door, saving facilities time and money with little required maintenance. Available in various residential-like colors, patterns and panel designs, Acrovyn Doors can match nearly any interior palette or theme. New Acrovyn Doors by Design can incorporate imagery, branding and messaging, even becoming part of a full wall mural. For facilities with patient safety in mind, CS Acrovyn Doors come in barrier resistant models as well.

Important Notice: This guide was created to educate professionals involved in the commercial building industry on various door types, allowing them to make informed decisions about the doors they specify or purchase. All of the doors in this guide are available in the industry, however, <u>Construction Specialties, Inc. (CS) does not</u> <u>manufacture or sell all of the listed door types. Look for the asterisk note under specific door images to find CS manufactured doors.</u>

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WOOD VENEER

What is it?

• Thin piece of stained wood (treated with or without a protective varnish) bonded to a solid backer

Suitable for what environments?

- Low traffic
- Offices, closets, private bathroom



Designability

- Multiple design options
- Aesthetically pleasing

Short Term Affordability

Low initial investment

Durability

- Abrasions, scrapes, or impact will reveal solid backer – showing a contrasting base color
- Square banded edge (two pieces of material that meet at a 90° angle)
- Cannot dissipate impact energy
- When impact occurs at the edge, damage can appear at both the edge and face
- Add on protection is typically used for extra durability (kickplates, etc)

Repairability

- Can be repaired if damaged similar to wood furniture
- Repairs can become costly & time consuming

Long Term Affordability

- Lifetime costs can add up to 4-5 times the initial investment cost, depending on application
- Low traffic areas require little maintenance, keeping costs down
- High traffic areas require add-on protection and/ or constant maintenance, adding costs

HIGH PRESSURE DECORATIVE LAMINATE (HPDL) & LOW PRESSURE DECORATIVE LAMINATE (LPDL)

What is it?

- HPDL door comprised of laminate material that is adhered to the door core at pressure thresholds of about 1000 psi
- Same type of material in pre-fabricated furniture (ie Wal-Mart, IKEA)
- LPDL same as HPDL, but material is adhered at lower pressure thresholds of about 400 psi

Suitable for what environments?

- Low traffic
- Offices, closets, private bathroom



Designability

Short Term Affordability

Low initial investments

Durability

- HPDL is typically more resistant to surface scratches or marks as compared to LPDL
- Both are comprised of brittle material which can start to crack, splinter or even break after some impact
- Square banded edge (two pieces of material that meet at a 90° angle)
- Cannot dissipate impact energy
- When impact occurs at the edge,damage can appear at both the edge and face

Repairability

- Very difficult to repair if damaged
- Typically, door would need to be re-skinned with new plastic laminate
- At times easier to purchase new door vs. repairing

Long Term Affordability

• Lifetime costs can add up to 4-5 times the initial investment cost, depending on repair costs (material & labor) or if doors are replaced after damage

HOLLOW METAL (INCLUDES ALUMINUM)

What is it?

• Door comprised of metal/aluminum on the outside. May feature a cardboard core

Suitable for what environments?

- High-traffic
- Industrial environments (warehouses)
- Stairwells
- Exterior doors
- Elevator lobbies



Designability

- Very little design options
- Metal door can be institutional looking
- Typically painted for added aesthetics

Short Term Affordability

• Low initial investment

Durability

- Metal is more durable than wood or plastic laminates
- Fracture resistant
- Still can get damaged from impacts
- Dent

Repairability

- If scratched or scuffed, can be painted
- Depending on consistency of impacts, may need constant repainting
- If dented, cannot be fixed

Long Term Affordability

• Lifetime costs can add up to 3-4 times the initial investment cost, depending on painting costs (paint & labor) or if doors are replaced after dents

FIBERGLASS REINFORCED POLYESTER (FRP)

What is it?

• Fiberglass reinforced polyester skin faces attached to an aluminum casing; inside of casing may or may not a foam (or polyurethane) core

Suitable for what environments?

- High-traffic
- Exterior doors/entrances (most common)
- Schools



Designability

- Very few aesthetic options
- Can look institutional
- Difficult to clean
- Grainy texture catches dirt & bacteria

Short Term Affordability

• High initial cost

Durability

- Very durable
- Suitable for most weather conditions

Repairability

• Typically does not need repairs

Long Term Affordability

• Requires very little maintenance throughout the life of the door

HIGH IMPACT/ IMPACT RESISTANT

What is it?

• Highly durable construction and material, designed specifically for high-traffic areas such as healthcare and education facilities

Suitable for what environments?

- High traffic
- Healthcare interiors (ie. Hospitals, nursing home, convalescent home, assisted living center, ambulatory/outpatient medical offices)
- Education interiors
- Stairways



Designability

- Endless design options including wood grains and solid colors
- PVC-Free options available

Short Term Affordability

• Higher initial cost

Durability

- Very durable
- Taber tests show face material can withstand higher levels of impact compared to wood veneer and high/low pressure laminates
- Options available with rounded edges for extra impact protections
- Over-engineered for low traffic areas

Repairability

- Options available with field replaceable edges and stiles if edges ever damaged
- Most damage occurs at the edge

Long Term Affordability

• Requires very little maintenance throughout the life of the door

*This door is available through Construction Specialties.

STILE & RAIL DOOR

What is it?

• Also known as a panel door; various paneled designs

Suitable for what environments?

- Low to mid-traffic
- Residential-type environments (ie. long term care facilities)



Designability

- Many design options
- Panel Designs
- Colors/patterns
- Very Customizable
- Non-institutional aesthetics

Short Term Affordability

- Higher initial cost
- Higher level of customization adds additional cost

Durability

- Depending on the material/construction, possibly unsuitable for higher traffic areas
- Some options available for higher traffic areas looking for residential aesthetics

Repairability

- If damaged, paneled design doors could be harder to fix
- Options available with replaceable edges for edge repair

Long Term Affordability

- Depending on material/construction, some maintenance over time will add costs
- If in lower traffic areas, very little maintenance needed

*This door is available through Construction Specialties.

WICKET DOOR (BARRIER RESISTANT)

What is it?

• A door within a door. Can be opened form the outside by staff if patient barricades themselves inside the room. Better and cheaper alternative to the pivot frame system which needs 180° clearance. Can also be used on existing frames.

Suitable for what environments?

- Low to high-traffic
- Only used in behavioral healthcare facilities where patient safety is vital



Designability

- Is offered in various colors and woodgrain patterns for better aesthetics
- Certain designs can be institutional looking

Short Term Affordability

• Higher costs due to specific application and design

Durability

• Typically, more durable for behavioral health facilities

Repairability

- Depends on initial door material used, repairability can vary
- Available with field replaceable edges for easy edge repair

Long Term Affordability

• Typically lower on maintenance leading to lower costs over time

*This door is available through Construction Specialties.

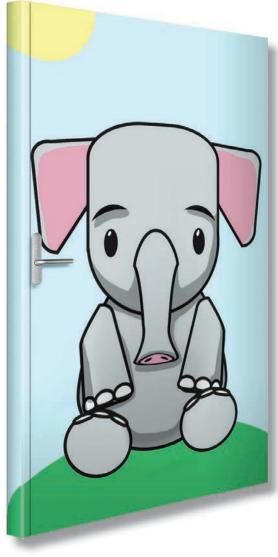
GRAPHIC DOOR

What is it?

• Doors in which endless imagery and graphics can be showcased on the face

Suitable for what environments?

- Low to High-traffic
- Areas that require premium finishes
- Areas that require comfortable/hospitality feel
- Education and healthcare facilities



*This door is available through Construction Specialties.

Designability

- Highest level of designability and customization
- Any type of design can be utilized (illustrations, photographs, custom patterns/textures, branding, signage, etc.)
- Allows for full murals with images continuing from the walls to the doors
- If door material varies, designs may not match perfectly between wall and door

Short Term Affordability

- Depending on the base material/construction
- Graphic capabilities increase initial costs

Durability

- Depending on the material/construction, may not last in higher traffic areas
- Options available with durable face material that protects the doors and images

Repairability

- If damaged, graphic design doors could be harder to fix due to the images on the face
- Options available with replaceable edges for edge repair

Long Term Affordability

• Lifetime costs depends on material/construction and on application

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