



LIFT-U[®]

Division of Hogan Manufacturing, Inc.

ADA Accessibility in the Courtroom

(LU0018)

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Making Courtrooms ADA Accessible



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Learning Objectives

- Requirements of the 2010 ADA Standards for Accessibility Design
- ADA Requirements for Courtrooms
- Different accessibility choices
- Implementing your choice
 - Ramps
 - Courtroom Lifts
 - Adaptability Package

Overview

The 2010 Standards set minimum requirements for both scoping and technical for:

- Newly designed and constructed or altered State or local government facilities
- Public accommodations
- Commercial facilities

They must be readily accessible to and usable by individuals with disabilities.

2010 Standards for Public Accommodations and Commercial Facilities:

Title III 28 CFR Part 36 Subpart D + 2004 ADAAG = 2010 ADA Standard

- New construction and alterations must comply with the 2010 Standards.

2010 Standards for State and Local Government Facilities:

Title II 28 CFR part 35.151 + 2004 ADAAG = 2010 ADA Standard

- All newly constructed or altered State and local government facilities must comply with the 2010 Standards.

EXCEPTION: If elements in existing facilities already comply with corresponding elements in the 1991 Standards or UFAS and are not being altered, then title II entities are not required to make changes to those elements to bring them into compliance with the 2010 Standards.

ADA 2010 Requirements for Courtrooms

2010 ADA Standards for Accessibility Design Requirements:

- Courtrooms: Requires access be provided to spectator seating, jury boxes, witness stands, and attorney's areas and other areas used by the public in all courtrooms.
- Wheelchair Turning Space: Requires adequate space for a wheelchair to make a 180° turn.
- Jury Boxes & Witness Stands: Requires at least one accessible wheelchair space.
- All Courtroom Work Stations must be adaptable; may be accessible.

ADA 2010 Requirements for Courtrooms

106.5 Defined Terms.

Assembly Area. *A building or facility, or portion thereof, used for the purpose of entertainment, educational or civic gatherings, or similar purposes. For the purposes of these requirements, assembly areas include, but are not limited to, classrooms, lecture halls, courtrooms, public meeting rooms, public hearing rooms, legislative chambers, motion picture houses, auditoria, theaters, playhouses, dinner theaters, concert halls, centers for the performing arts, amphitheaters, arenas, stadiums, grandstands, or convention centers.*

ADA 2010 Requirements for Courtrooms

206 Accessible Routes

206.1 General. *Accessible* routes shall be provided in accordance with 206 and shall comply with Chapter 4.

206.2 Where Required. *Accessible* routes shall be provided where required by 206.2.

206.2.4 Spaces and Elements. At least one *accessible* route shall connect *accessible building* or *facility entrances* with all *accessible spaces* and *elements* within the *building* or *facility* which are otherwise connected by a *circulation path* unless exempted by 206.2.3 Exceptions 1 through 7.

EXCEPTIONS: 1. Raised courtroom stations, including judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, and court reporters' stations shall not be required to provide vertical access provided that the required clear floor *space*, maneuvering *space*, and, if appropriate, electrical service are installed at the time of initial construction to allow future installation of a means of vertical access complying with 405, 407, 408, or 410 without requiring substantial reconstruction of the *space*.

ADA 2010 Requirements for Courtrooms

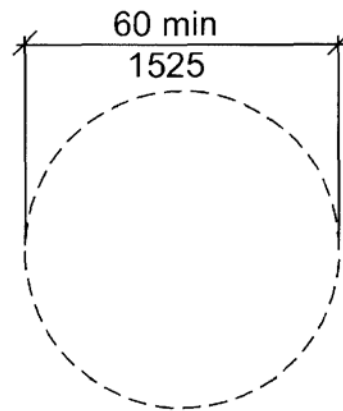
808 Courtrooms

808.1 General. Courtrooms shall comply with 808.

808.2 Turning Space. Where provided, areas that are raised or depressed and accessed by ramps or platform lifts with entry ramps shall provide unobstructed turning space complying with 304.

304.3 Size. Turning *space* shall comply with 304.3.1 or 304.3.2.

304.3.1 Circular Space. The turning *space* shall be a *space* of 60 inches (1525 mm) diameter minimum. The *space* shall be permitted to include knee and toe clearance complying with 306.



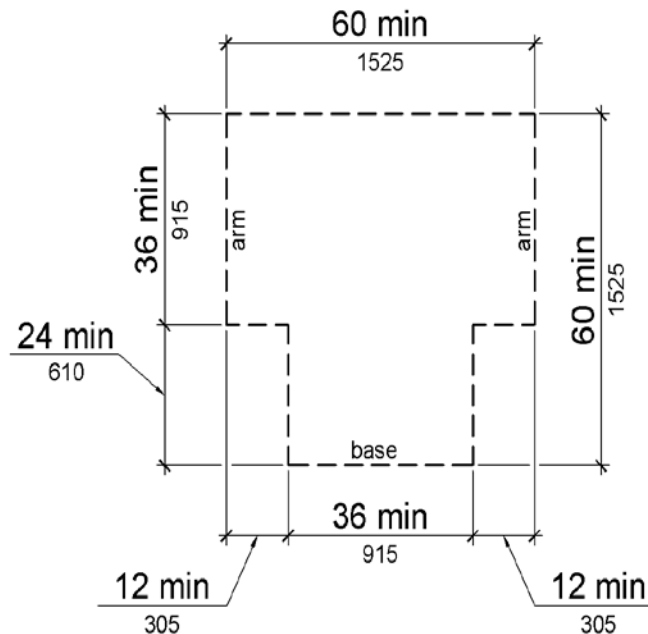
(a) Circular

ADA 2010 Requirements for Courtrooms

808 Courtrooms

808.2 Turning Space.

304.3.2 T-Shaped Space. The turning *space* shall be a T-shaped *space* within a 60 inch (1525 mm) square minimum with arms and base 36 inches (915 mm) wide minimum. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction and the base shall be clear of obstructions 24 inches (610 mm) minimum. The *space* shall be permitted to include knee and toe clearance complying with 306 only at the end of either the base or one arm.



ADA 2010 Requirements for Courtrooms

808 Courtrooms

808.3 Clear Floor Space. Each jury box and witness stand shall have, within its defined area, clear floor space complying with 305.

305 Clear Floor or Ground Space

305.1 General. Clear floor or ground *space* shall comply with 305.

305.2 Floor or Ground Surfaces. Floor or ground surfaces of a clear floor or ground *space* shall comply with 302. Changes in level are not permitted.

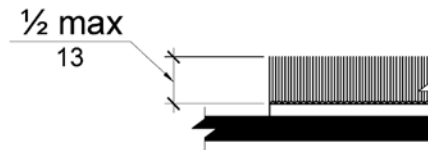


Figure 302.2
Carpet Pile Height

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

ADA 2010 Requirements for Courtrooms

808 Courtrooms

808.3 Clear Floor Space.

305.3 Size. The clear floor or ground *space* shall be 30 inches (760 mm) minimum by 48 inches (1220 mm) minimum.

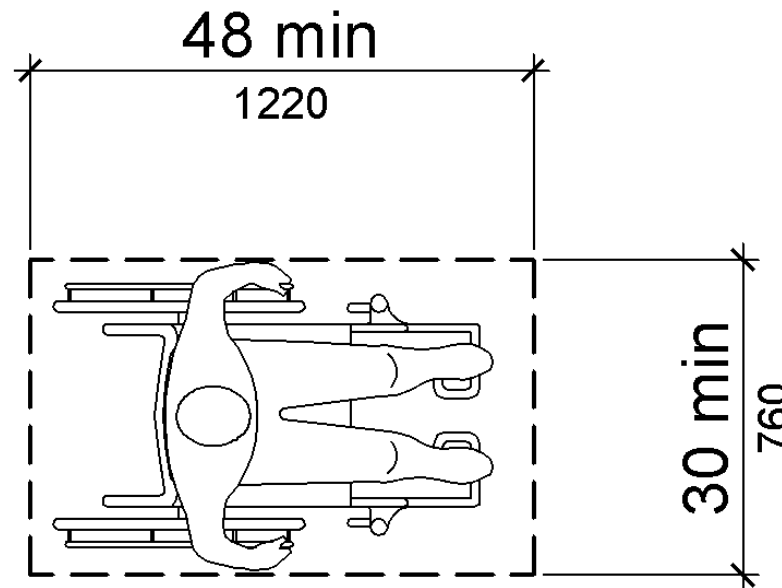


Figure 305.3
Clear Floor or Ground Space

ADA 2010 Requirements for Courtrooms

808 Courtrooms

808.3 Clear Floor Space.

305.4 Knee and Toe Clearance. Unless otherwise specified, clear floor or ground *space* shall be permitted to include knee and toe clearance complying with 306.

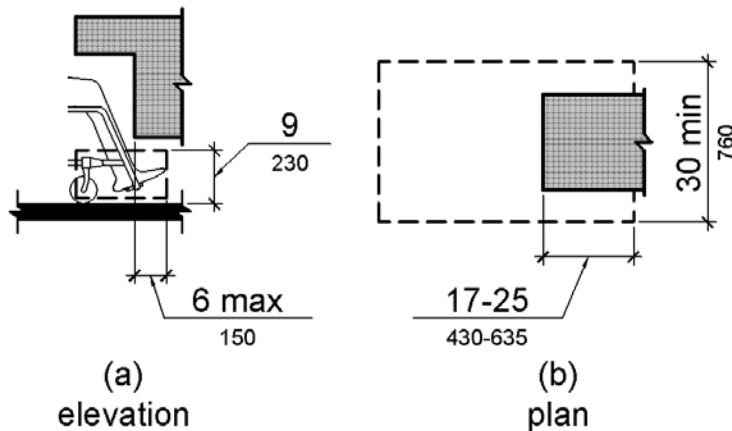


Figure 306.2
Toe Clearance

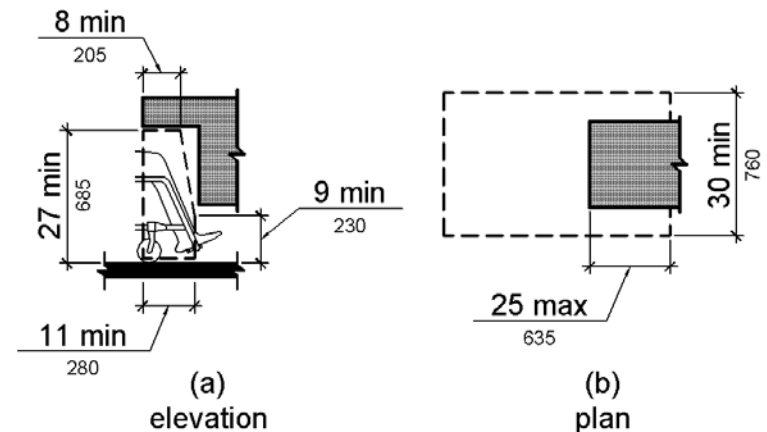


Figure 306.3
Knee Clearance

ADA 2010 Requirements for Courtrooms

808 Courtrooms

808.3 Clear Floor Space.

EXCEPTION: In *alterations*, *wheelchair spaces* are not required to be located within the defined area of raised jury boxes or witness stands and shall be permitted to be located outside these *spaces* where *ramp* or platform lift access poses a hazard by restricting or projecting into a means of egress required by the appropriate *administrative authority*.

ADA 2010 Requirements for Courtrooms

808 Courtrooms

808.4 Judges' Benches and Courtroom Stations. Judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, court reporters' stations and litigants' and counsel stations shall comply with 902.

902 Dining Surfaces and Work Surfaces

902.1 General. Dining surfaces and work surfaces shall comply with 902.2 and 902.3.

902.2 Clear Floor or Ground Space. A clear floor *space* complying with 305 positioned for a forward approach shall be provided. Knee and toe clearance complying with 306 shall be provided.

902.3 Height. The tops of dining surfaces and work surfaces shall be 28 inches (710 mm) minimum and 34 inches (865 mm) maximum above the finish floor or ground.

ADA 2010 Requirements Summarized

Public Areas in Courtrooms

- The 2010 ADA Standards for Accessibility Design require all Public Areas in the Courtroom - Attorney Tables, Jury Box, and Witness Stand be accessible in all courtrooms
- Options available:
 - Place station at floor level
 - Use ramps
 - Use Courtroom Lifts

ADA 2010 Requirements Summarized

Non-Public Areas in Courtrooms

- The 2010 ADA Standards for Accessibility Design require all Courtroom Stations that are not accessible to be made adaptable.
- Options available:
 - Place station at floor level
 - Use ramps
 - Use Courtroom Lifts
 - Use Adaptability Package

Implementation

- Elevated Courtroom Stations
- Ramps or lifts can be used for access.
- ACCESS MUST BE PERMANENT - portable, fold-out or telescoping ramps or lifts are not permitted.
- Removable seats can overlap the wheelchair space.
- Station can be made adaptable for future accessibility. Adaptability package is available to simplify compliance.



Implementation Considerations

Implementation

Introduction

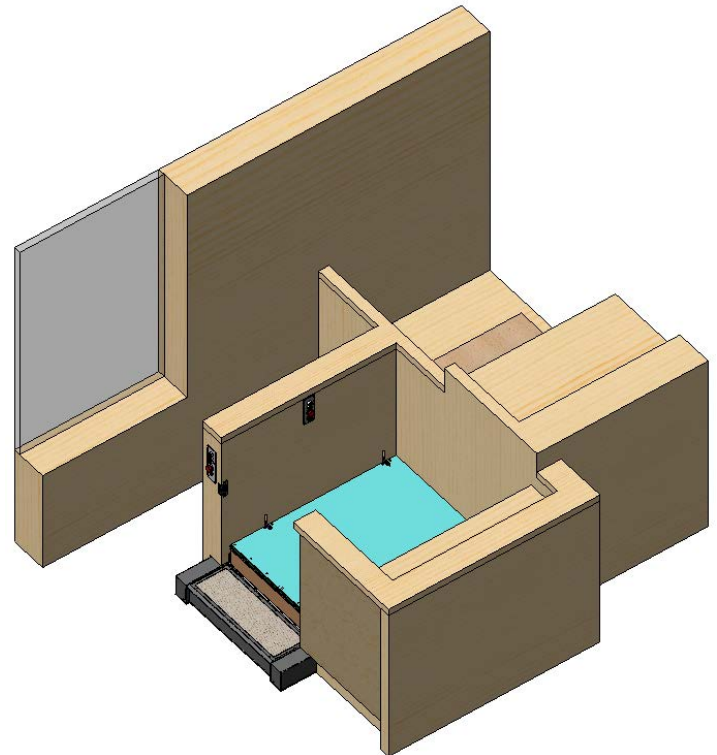
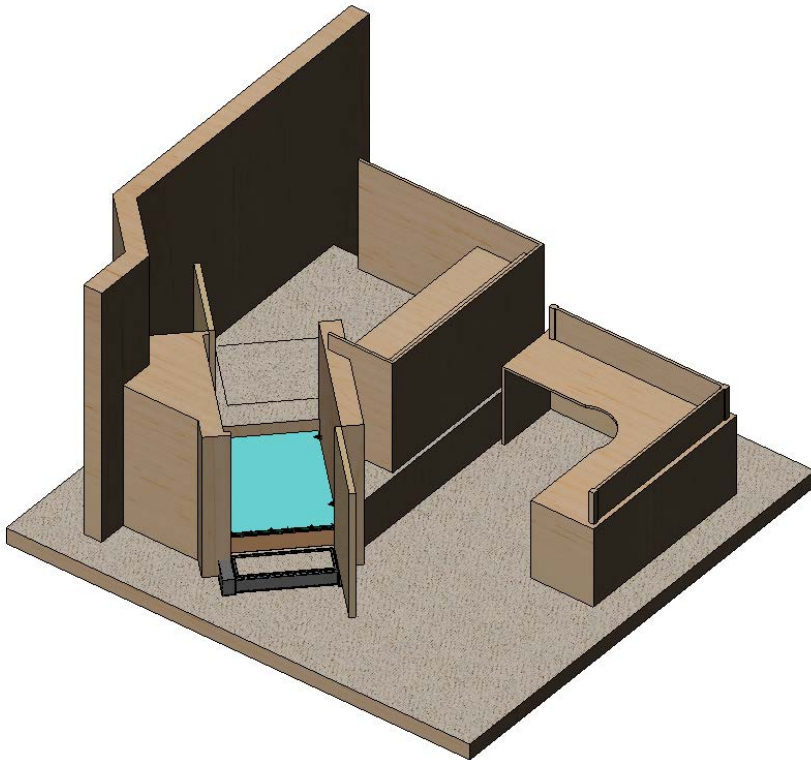
- Some areas are simply not accessible without the use of a ramp or lift system
- For example, witness stands, jury boxes, court clerk & reporters stations, and judges' benches



Implementation

206 Accessible Routes

206.7.4 Judicial Spaces. Platform lifts shall be permitted to provide an *accessible* route to: jury boxes and witness stands; raised courtroom stations including, judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, and court reporters' stations; and to depressed areas such as the well of a court.



Implementation - Ramps

Site Preparation for Ramps

- What are the ADA Requirements for Ramps?
- What site preparation is required?
 - Will courtroom layout have to be changed?
 - Is there adequate floor space available for a ramp?
 - Will the ramp require a major modification to the floor?
 - Are tripping hazards created?
 - Are normal foot traffic patterns changed?

Implementation - Ramps

Example of Non-Compliant Ramp



ADA 2010 Requirements for Ramps

106.5 Defined Terms.

Ramp. A walking surface that has a *running slope* steeper than 1:20.

405 Ramps

405.1 General. *Ramps* on *accessible* routes shall comply with 405.

405.2 Slope. *Ramp* runs shall have a *running slope* not steeper than 1:12.

EXCEPTION: In existing *sites, buildings, and facilities*, *ramps* shall be permitted to have *running slopes* steeper than 1:12 complying with Table 405.2 where such slopes are necessary due to *space* limitations.

Table 405.2 Maximum Ramp Slope and Rise for Existing Sites, Buildings, and Facilities

Slope ¹	Maximum Rise
Steeper than 1:10 but not steeper than 1:8	3 inches (75 mm)
Steeper than 1:12 but not steeper than 1:10 1. A slope steeper than 1:8 is prohibited.	6 inches (150 mm)

ADA 2010 Requirements for Ramps

405 Ramps

405.3 Cross Slope. *Cross slope* of *ramp* runs shall not be steeper than 1:48.

405.4 Floor or Ground Surfaces. Floor or ground surfaces of *ramp* runs shall comply with 302. Changes in level other than the *running slope* and *cross slope* are not permitted on *ramp* runs.

405.5 Clear Width. The clear width of a *ramp* run and, where handrails are provided, the clear width between handrails shall be 36 inches (915 mm) minimum.

EXCEPTION: Within *employee work areas*, the required clear width of *ramps* that are a part of *common use circulation paths* shall be permitted to be decreased by *work area equipment* provided that the decrease is essential to the function of the work being performed.

ADA 2010 Requirements for Ramps

405 Ramps

405.6 Rise. The rise for any *ramp* run shall be 30 inches (760 mm) maximum.

405.7 Landings. *Ramps* shall have landings at the top and the bottom of each *ramp* run. Landings shall comply with 405.7.

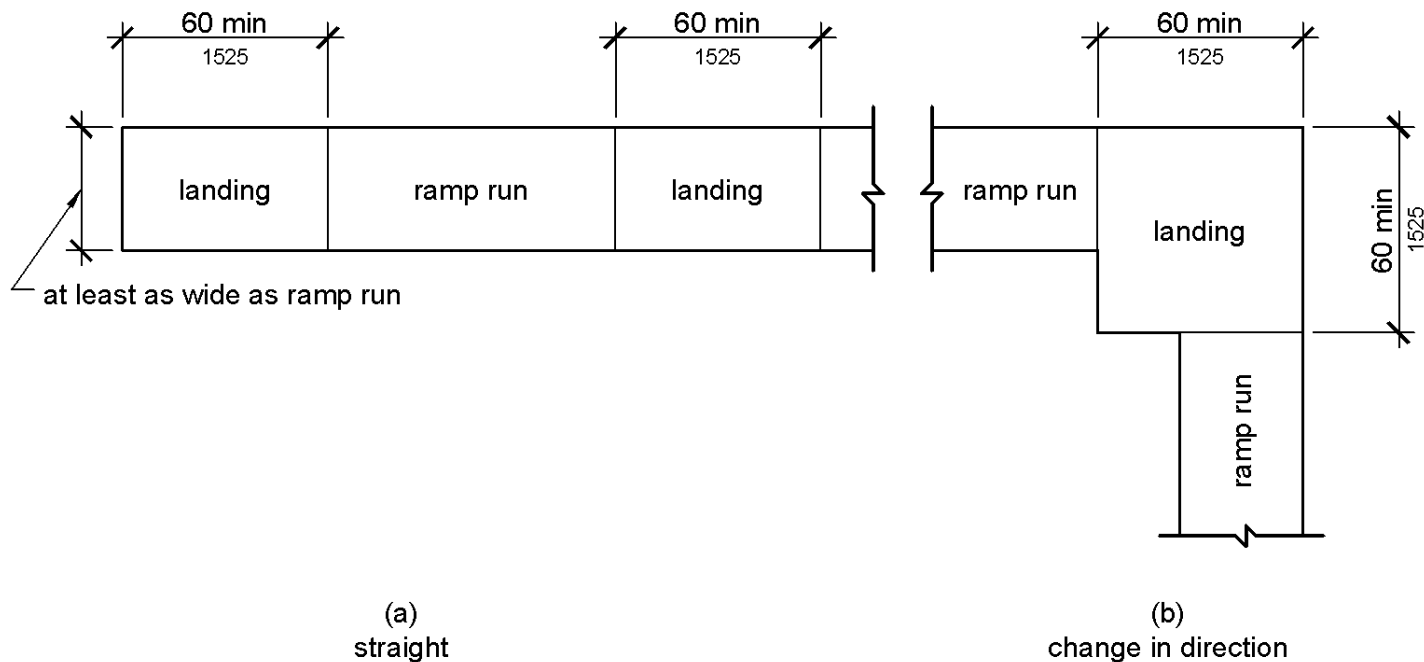


Figure 405.7
Ramp Landings

ADA 2010 Requirements for Ramps

405 Ramps

405.7 Landings.

405.7.1 Slope. Landings shall comply with 302. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

405.7.2 Width. The landing clear width shall be at least as wide as the widest *ramp* run leading to the landing.

405.7.3 Length. The landing clear length shall be 60 inches (1525 mm) long minimum.

405.7.4 Change in Direction. *Ramps* that change direction between runs at landings shall have a clear landing 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum.

405.7.5 Doorways. Where doorways are located adjacent to a *ramp* landing, maneuvering clearances required by 404.2.4 and 404.3.2 shall be permitted to overlap the required landing area.

ADA 2010 Requirements for Ramps

405 Ramps

405.8 Handrails. *Ramp* runs with a rise greater than 6 inches (150 mm) shall have handrails complying with 505.

EXCEPTION: Within *employee work areas*, handrails shall not be required where *ramps* that are part of *common use circulation paths* are designed to permit the installation of handrails complying with 505. *Ramps* not subject to the exception to 405.5 shall be designed to maintain a 36 inch (915 mm) minimum clear width when handrails are installed.

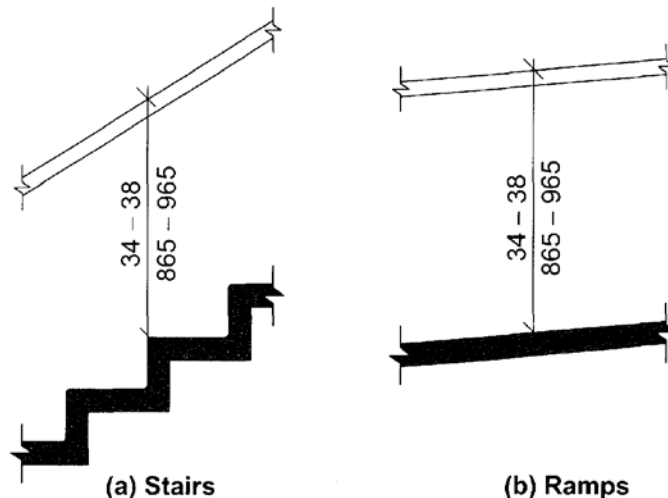


FIG. 505.4
HANDRAIL HEIGHT

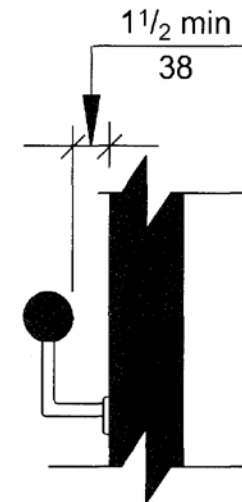


FIG. 505.5
HANDRAIL CLEARANCE

ADA 2010 Requirements for Ramps

405 Ramps

405.9 Edge Protection. Edge protection complying with 405.9.1 or 405.9.2 shall be provided on each side of *ramp* runs and at each side of *ramp* landings.

EXCEPTIONS: 1. Edge protection shall not be required on *ramps* that are not required to have handrails and have sides complying with 406.3.

2. Edge protection shall not be required on the sides of *ramp* landings serving an adjoining *ramp* run or stairway.

3. Edge protection shall not be required on the sides of *ramp* landings having a vertical drop-off of ½ inch (13 mm) maximum within 10 inches (255 mm) horizontally of the minimum landing area specified in 405.7.

ADA 2010 Requirements for Ramps

405 Ramps

405.9.1 Extended Floor or Ground Surface. The floor or ground surface of the *ramp* run or landing shall extend 12 inches (305 mm) minimum beyond the inside face of a handrail complying with 505.

Advisory 405.9.1 Extended Floor or Ground Surface. The extended surface prevents wheelchair casters and crutch tips from slipping off the ramp surface.

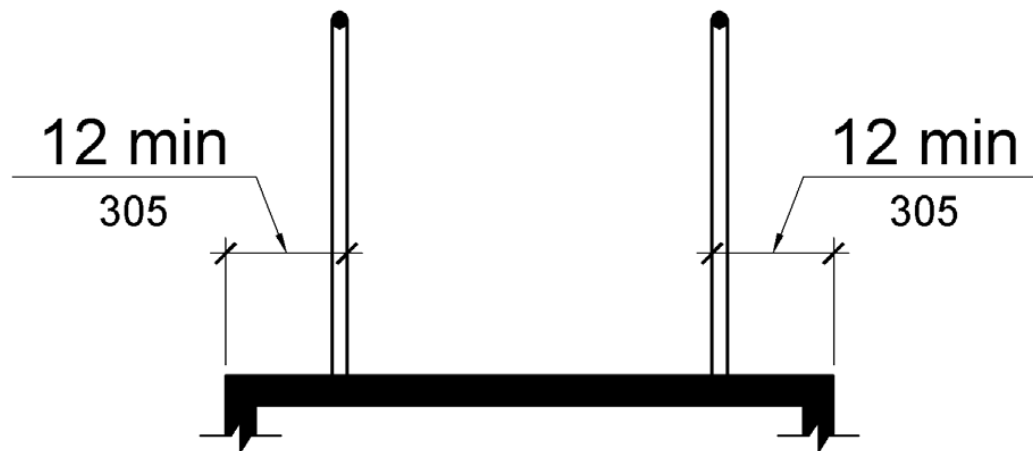


Figure 405.9.1
Extended Floor or Ground Surface Edge Protection

ADA 2010 Requirements for Ramps

405 Ramps

405.9.2 Curb or Barrier. A curb or barrier shall be provided that prevents the passage of a 4 inch (100 mm) diameter sphere, where any portion of the sphere is within 4 inches (100 mm) of the finish floor or ground surface.

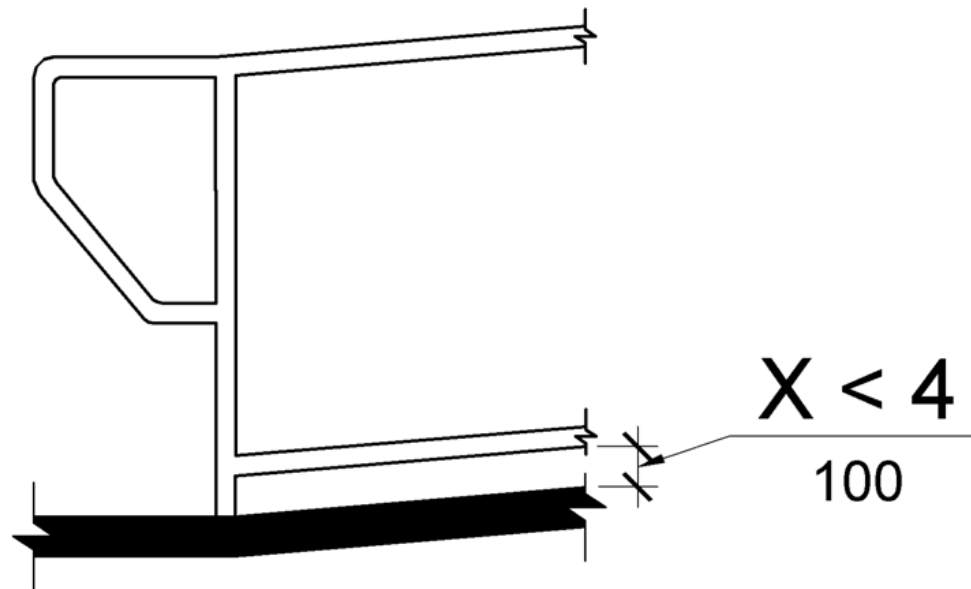


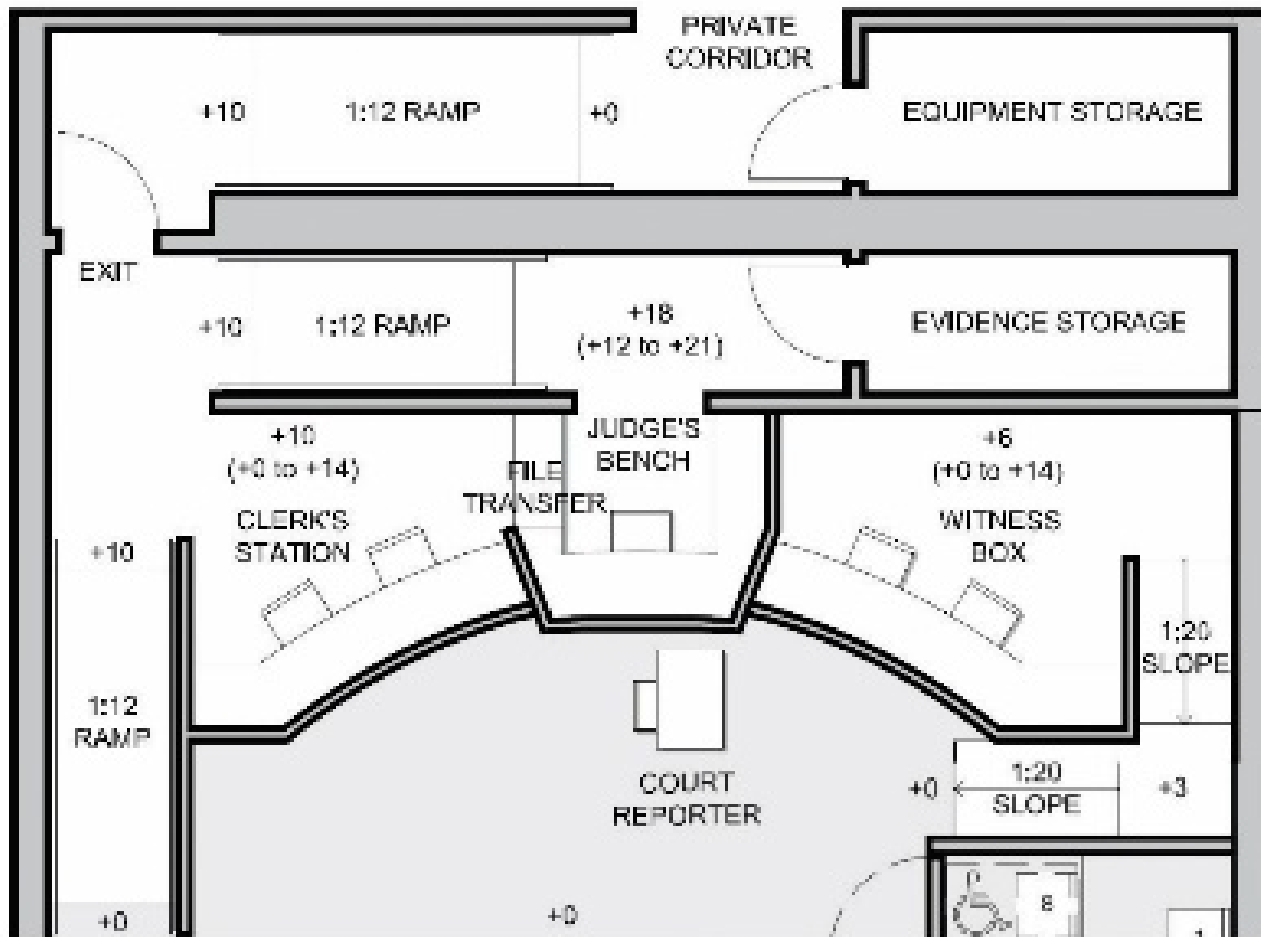
Figure 405.9.2
Curb or Barrier Edge Protection

Implementation - Ramps

Space Requirements for Ramps

- How much space does the device require? A minimum of 5 sq. ft. per inch of rise!
- What is the cost of floor space? Courtroom space is averaging about \$500 per sq. ft. across the USA or \$2,500 per inch of rise!
- Is the space available or will it need to be reallocated? Dedicated, single purpose space is precious in courtrooms.
- Will the space be well utilized? Unless the ramp is used by all, the space is seldom used.
- The ramp commits the space forever. No rearrangement is possible.

Implementation - Ramps



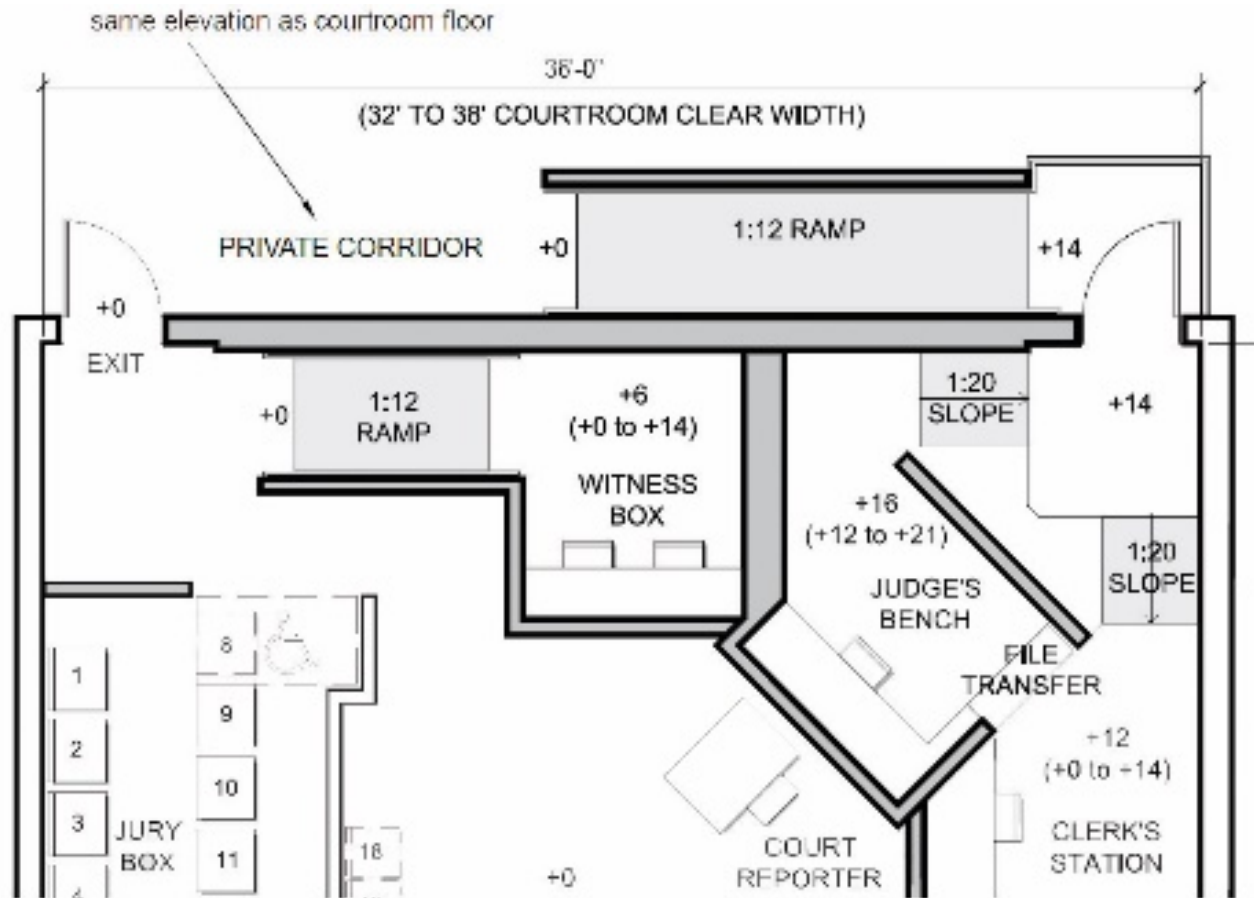
Implementation - Ramps

Courtroom Ramps

- Courtroom ramps can allow both mobility-impaired and pedestrian traffic with major compromises to the use of the square footage.
- Ramps require considerable space and are challenging to integrate into courtroom design.



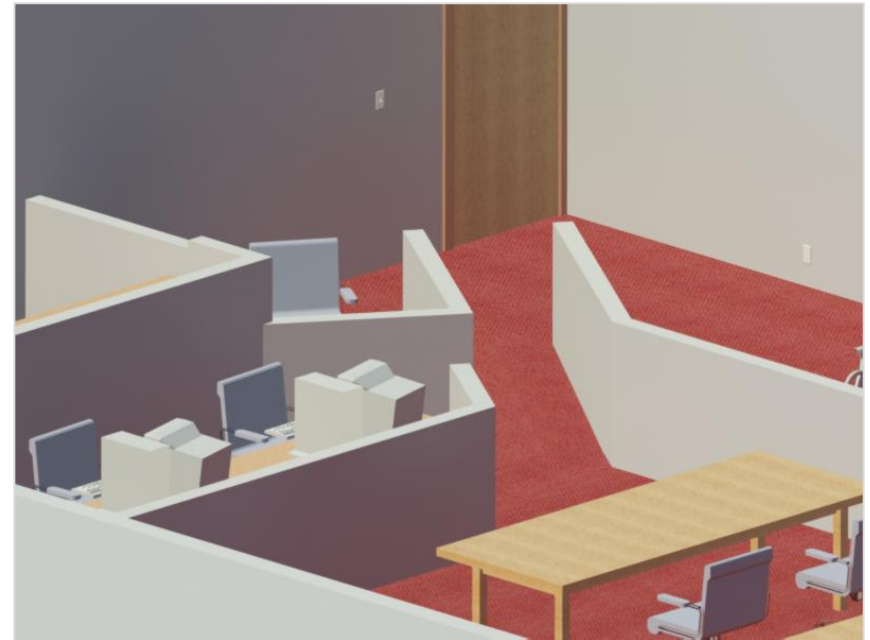
Implementation - Ramps



Implementation - Ramps

Review

- Accessibility - Good
- Ease of Operation - Fair
- Space Efficiency - Poor
- Aesthetics - Design Dependent
- Cost - High
- Maintenance - Low
- Ease of Installation - Makes floor work more complex; difficult as retrofit



Implementation - Lifts

Site Preparation for Lifts

- What are the ADA Requirements for Lifts
- What site preparation is required?
 - Will millwork have to be changed?
 - Will the device require a pit below floor level?
 - What type of electrical power is required?

Implementation - Lifts

Example of Non-Compliant Lift



ADA 2010 Requirements for Lifts

410 Platform Lifts

410.1 General. Platform lifts shall comply with ASME A18.1 (1999 edition or 2003 edition) (incorporated by reference, see “Referenced Standards” in Chapter 1). Platform lifts shall not be attendant-operated and shall provide unassisted entry and exit from the lift.

Advisory 410.1 General. Inclined stairway chairlifts and inclined and vertical platform lifts are available for short-distance vertical transportation. Because an accessible route requires an 80 inch (2030 mm) vertical clearance, care should be taken in selecting lifts as they may not be equally suitable for use by people using wheelchairs and people standing. If a lift does not provide 80 inch (2030 mm) vertical clearance, it cannot be considered part of an accessible route in new construction.

ADA 2010 Requirements for Lifts

ASME A18.1

In 2008, the ASME A18 Committee added Section 2.1.4 Courtroom Lifts to the Standard. A majority of AHJ's across the country have adopted the 2008, 2011, or 2014 editions of the ASME A18 Standard.

Due to the unique environment that exists in a courtroom, A18 allows deviation from the standard code requirements for a traditional VPL.

For Example:

- 36-inch high sidewalls and lower landing door measured from the lower landing.
- Platform size up to 25 ft².
- Upper level door 36-inches high measured from the upper landing.
- Removed requirement for platform-mounted sidewalls.
- Platform controls mounted to stationary sidewall.

ADA 2010 Requirements for Lifts

410 Platform Lifts

410.2 Floor Surfaces. Floor surfaces in platform lifts shall comply with 302 and 303.

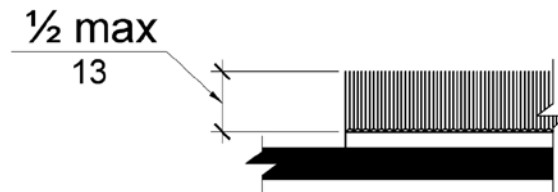


Figure 302.2
Carpet Pile Height

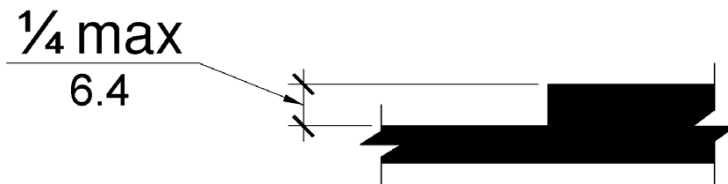


Figure 303.2
Vertical Changes in Level

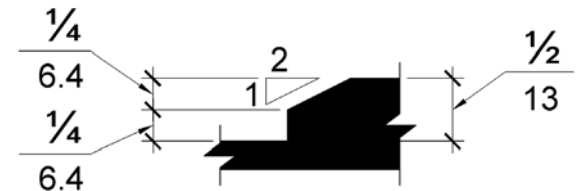


Figure 303.3
Beveled Change in Level

ADA 2010 Requirements for Lifts

410 Platform Lifts

410.3 Clear Floor Space. Clear floor *space* in platform lifts shall comply with 305.

305.3 Size. The clear floor or ground *space* shall be 30 inches (760 mm) minimum by 48 inches (1220 mm) minimum.

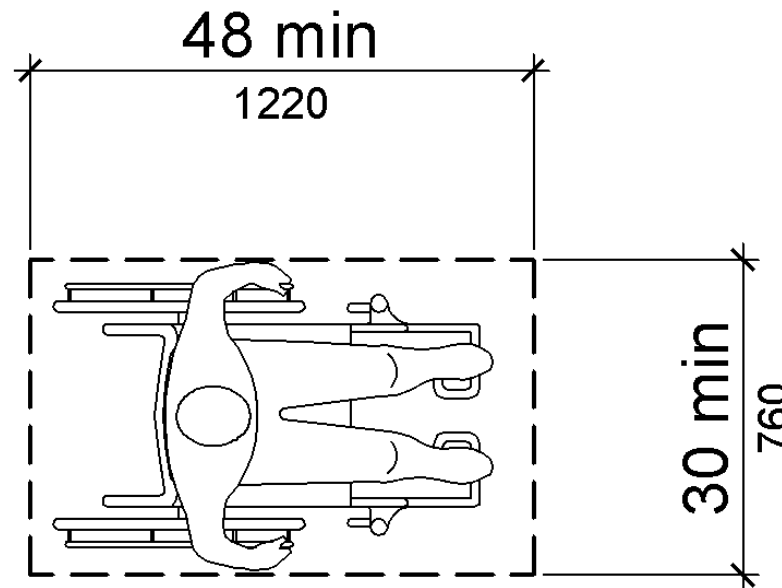


Figure 305.3
Clear Floor or Ground Space

ADA 2010 Requirements for Lifts

410 Platform Lifts

410.4 Platform to Runway Clearance. The clearance between the platform sill and the edge of any runway landing shall be 1¼ inch (32 mm) maximum.

NOTE: ASME LANGUAGE

410.5 Operable Parts. Controls for platform lifts shall comply with 309.

309 Operable Parts

309.1 General. *Operable parts* shall comply with 309.

309.2 Clear Floor Space. A clear floor or ground *space* complying with 305 shall be provided.

309.3 Height. *Operable parts* shall be placed within one or more of the reach ranges specified in 308.

309.4 Operation. *Operable parts* shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate *operable parts* shall be 5 pounds (22.2 N) maximum.

ADA 2010 Requirements for Lifts



ADA 2010 Requirements for Lifts

410 Platform Lifts

410.6 Doors and Gates. Platform lifts shall have low-energy power-operated doors or gates complying with 404.3. Doors shall remain open for 20 seconds minimum. End doors and gates shall provide a clear width 32 inches (815 mm) minimum. Side doors and gates shall provide a clear width 42 inches (1065 mm) minimum.

EXCEPTION: Platform lifts serving two landings maximum and having doors or gates on opposite sides shall be permitted to have self-closing manual doors or gates.

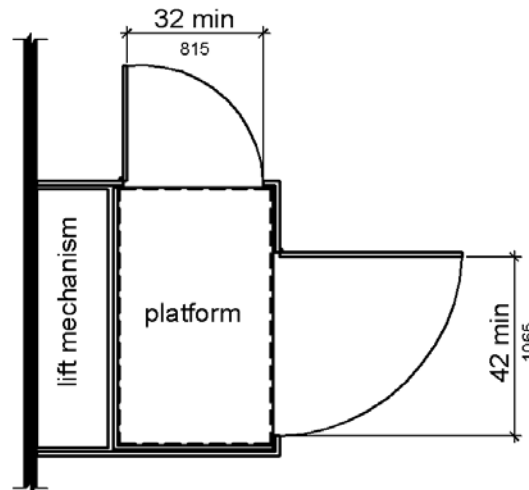


Figure 410.6

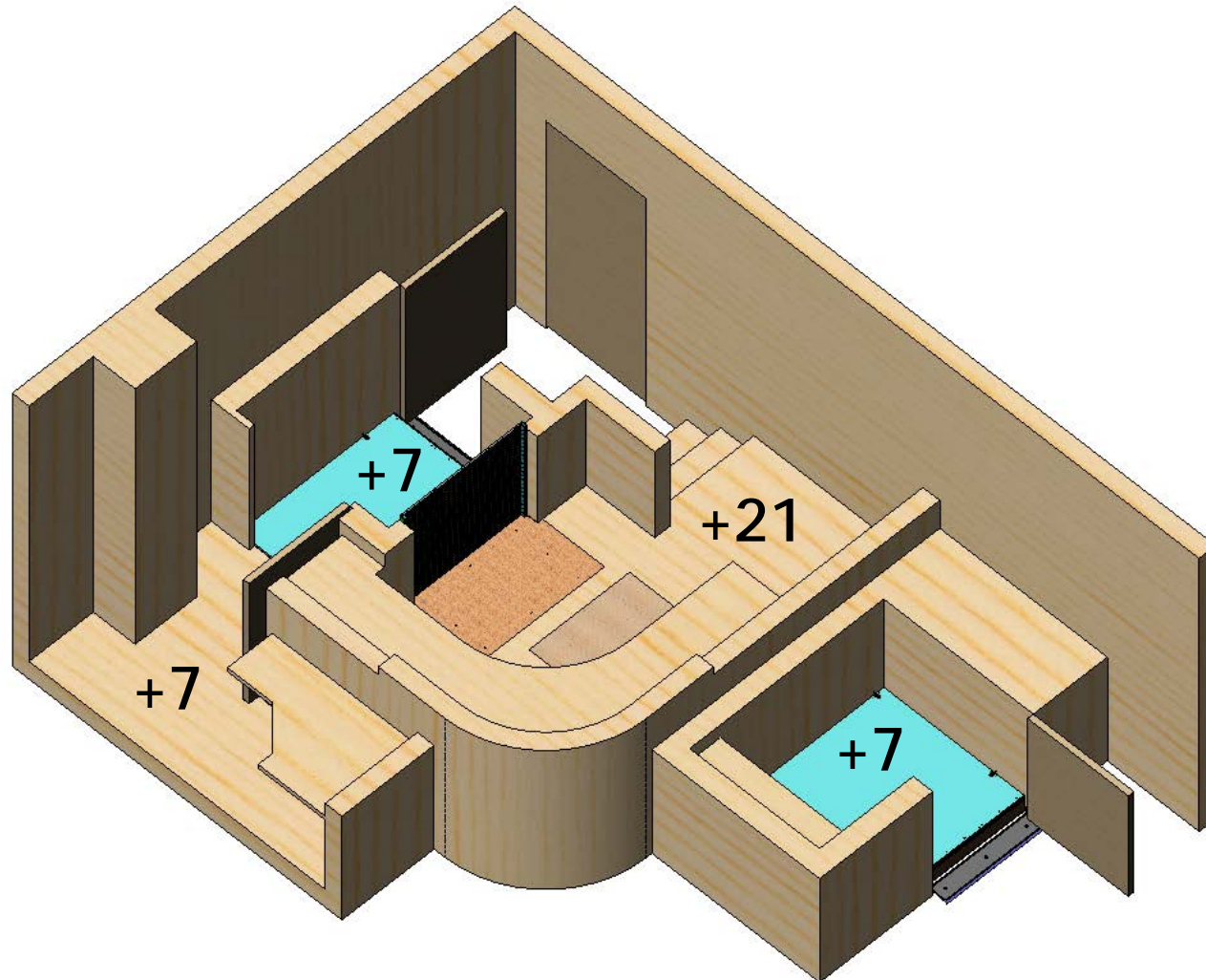
Platform Lift Doors and Gates

Implementation - Lifts

Space Requirements for Lifts

- How much space does the device require? No additional space is required. The lift is included in the witness stand space.
- What is the cost of floor space? Courtroom space is averaging about \$500 per sq. ft across the USA. No additional space is required.
- Is the space available or will it need to be reallocated? Witness stand space is available and no reallocation is needed.
- Will the space be well utilized? The space is used by both able-bodied and mobility impaired alike.

Implementation - Lifts



Implementation - Lifts

Courtroom Lifts

- Courtroom Lifts are a viable option when floor space is limited & design flexibility is needed
- Courtroom Lifts require no additional space and are integrated into the courtroom design
- Courtroom Lifts provide accessibility without detracting from Courtroom decorum
- Courtroom lifts allow both mobility-impaired and pedestrian use



Implementation - Lifts

Desired Features

- Accessibility - Good
- Ease of Operation - Good
- Space Efficiency - Good
- Aesthetics - Good, concealed
- Cost - Moderate
- Maintenance - Periodic inspections required
- Ease of Installation - Straight forward new or retrofit



Implementation - Lifts

Selection Criteria:

- Project Funding
- Perceptions about Lifts
- Installation Costs
- Ease of Use
- Visual Impact
- Space Requirement

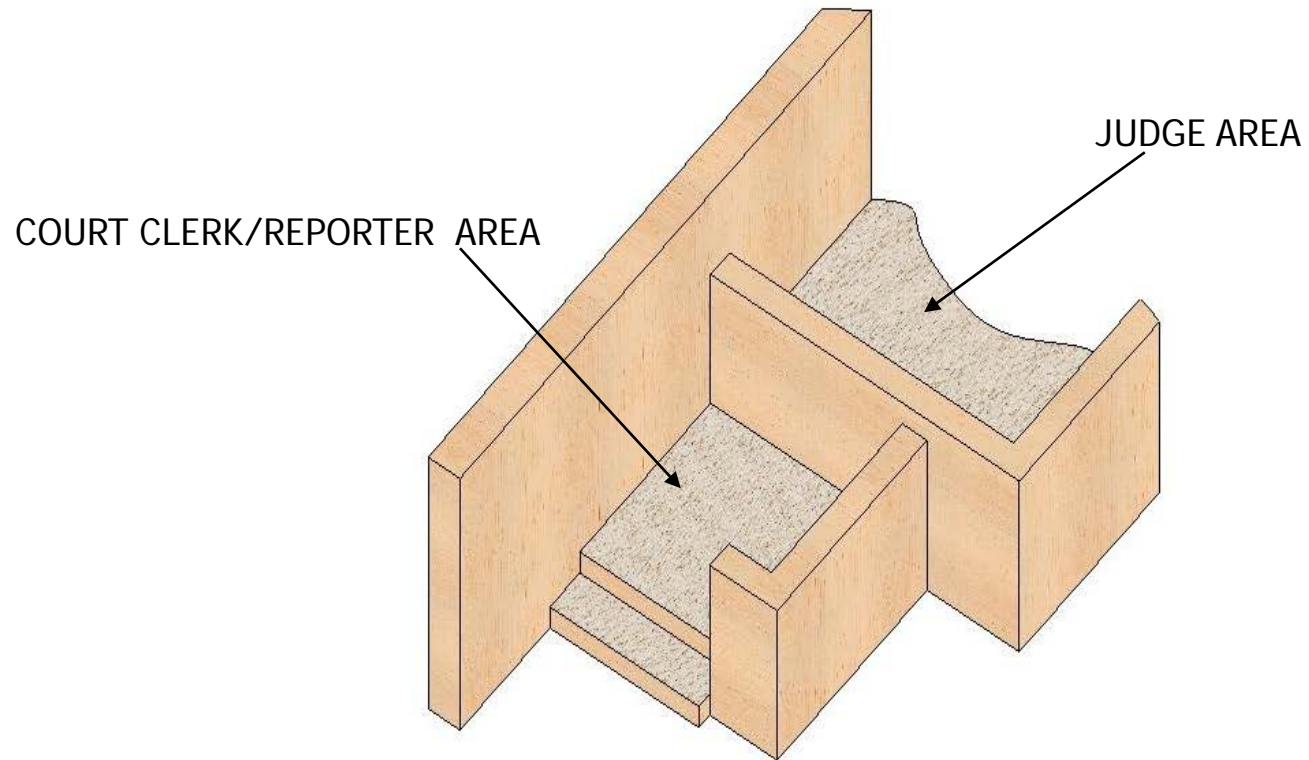


Implementation

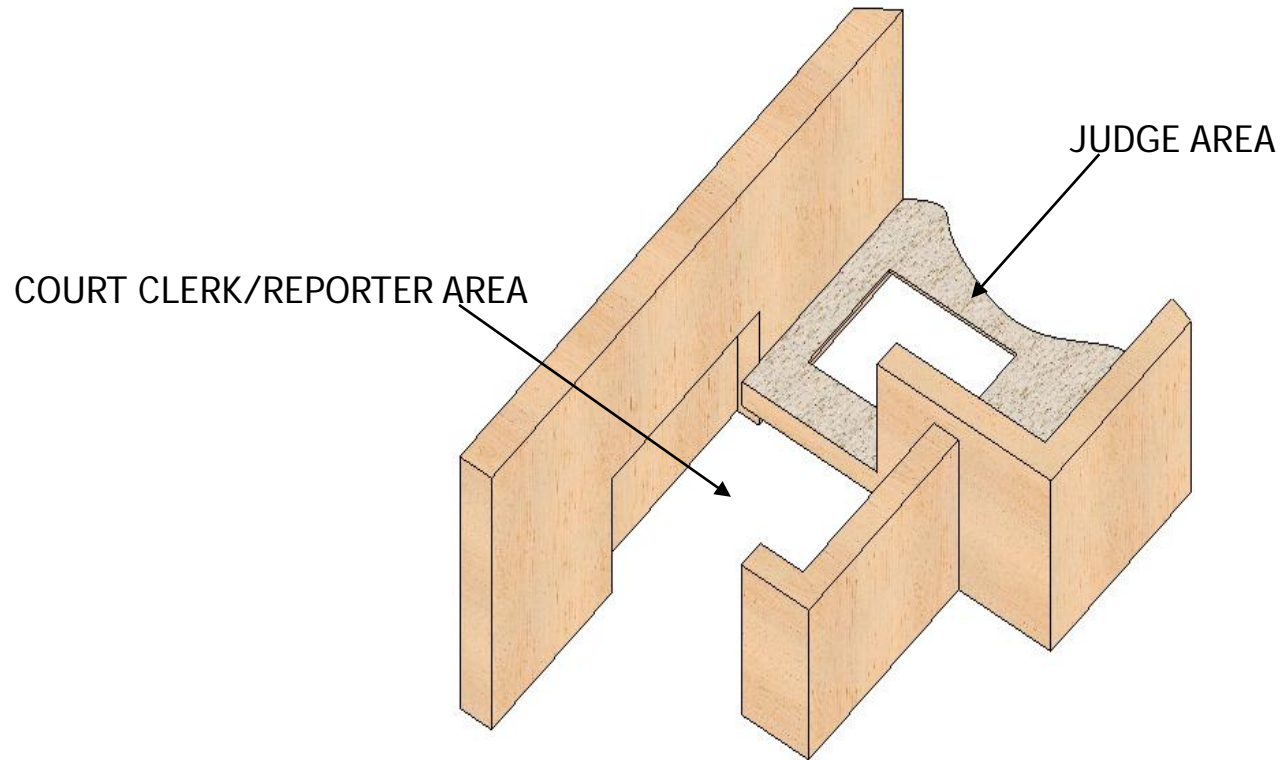
Adaptability Package

- Prepares Judges' Bench Elevated Work Station for the future installation of a Courtroom Lift at minimum cost with minimum disruption to the Court schedule and the installed millwork.
- Adaptability Package consists of drawings and specifications used by the General Contractor at the time of Judges' Bench Elevated Work Station structural build-out.

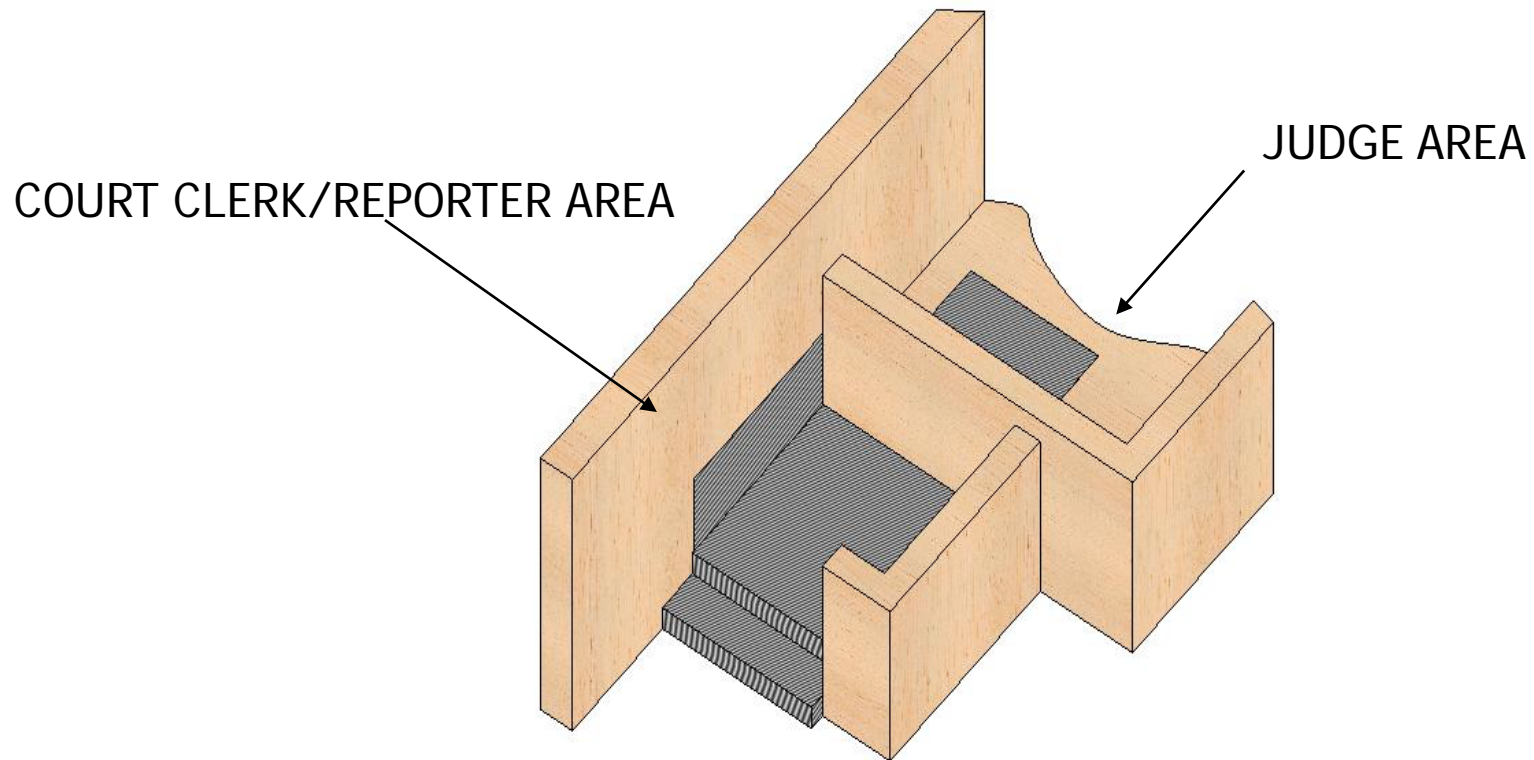
EXISTING MILLWORK



MODIFICATIONS TO ACCEPT COURTROOM LIFT

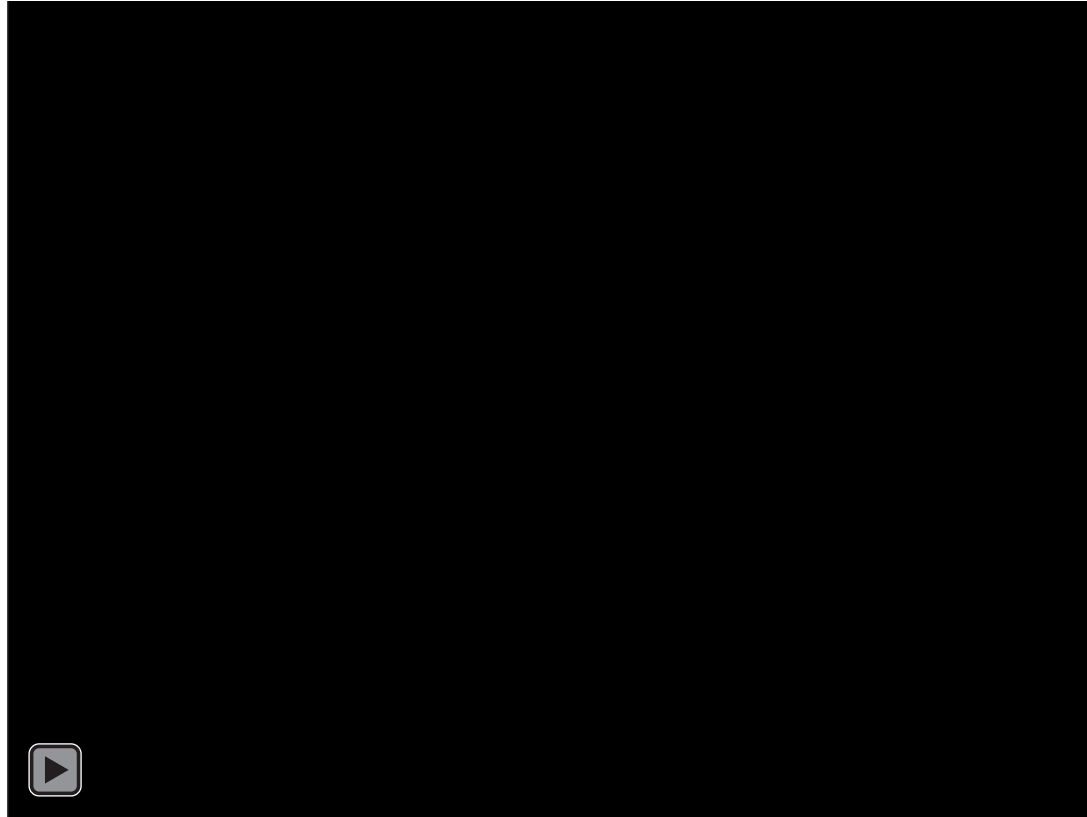


MILLWORK MODIFICATION AREAS



How a Courtroom Lift Operates

Courtroom Lift Video



Lift Features Available to Protect Courtroom Decorum

- * **Roll-up Barrier** - no swing gate in witness stand



Lift Features Available to Protect Courtroom Decorum

* Operable Step / Ramp - no removable step



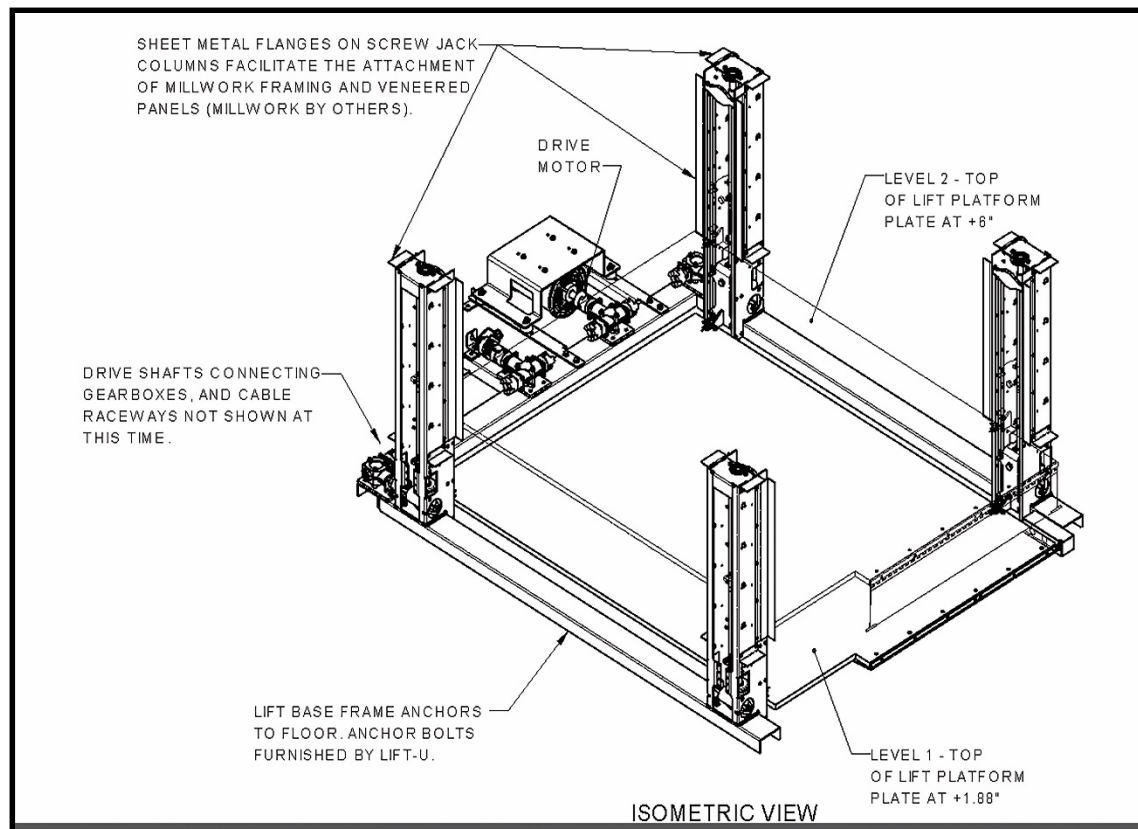
Lift Features Available to Protect Courtroom Decorum

*Power gate operator - invisible, inside millwork



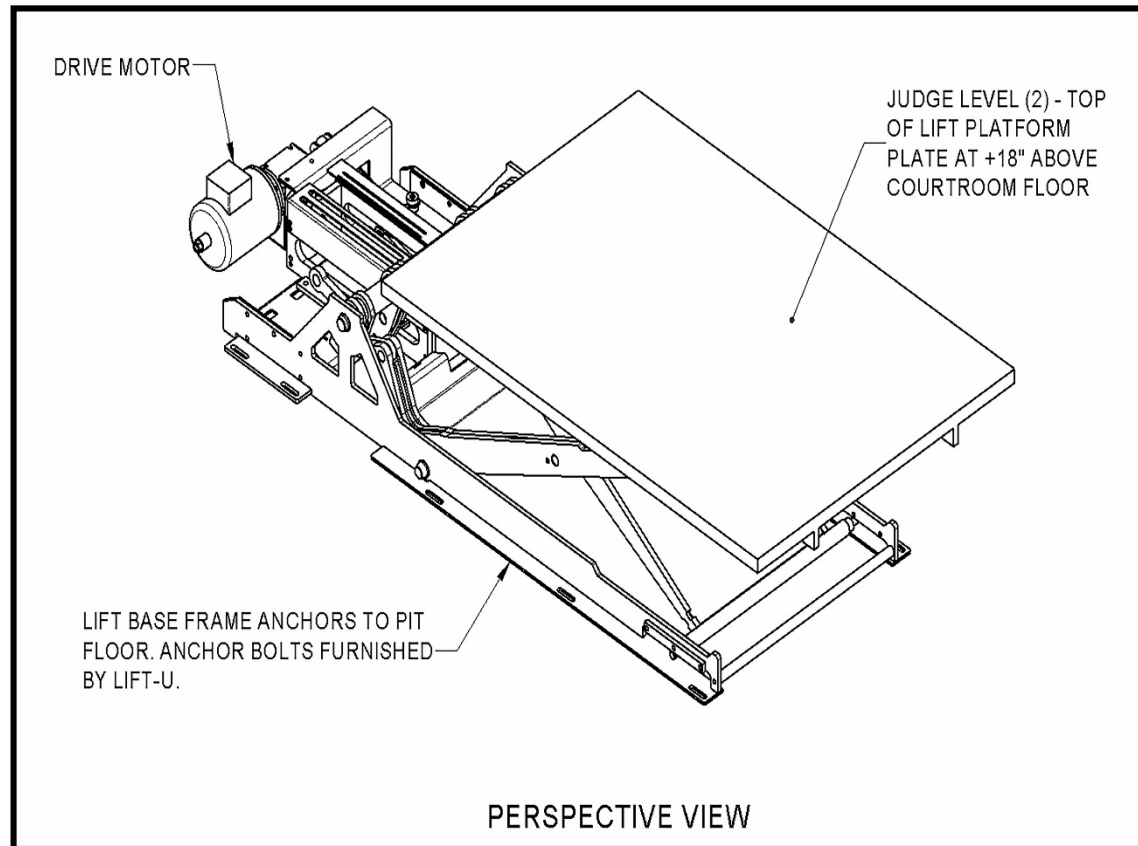
Lift Features Available to Protect Courtroom Decorum

- All-electric operation - no hydraulic issues
 - Stable Platform - 4 corner support
 - No Pit Required



Lift Features Available to Protect Courtroom Decorum

- All-electric operation - no hydraulic issues
- Stable platform support - no "springiness"
 - 6 inch floor recess required



Course Summary

- The 2010 ADA Standards for Accessible Design affirms the right of people to enjoy "equal access to basic institutions...including courtrooms."
- The 2010 ADA Standards for Accessibility Design require all Public Areas in the Courtroom - Attorney Tables, Jury Box, and Witness Stand be accessible in all courtrooms. In addition, the Standard requires all non-public Courtroom Stations that are not accessible to be made adaptable to reduce future construction costs.
- Utilize vertical platform lifts or ramps to provide access to raised stations in the courtroom.
- Ramps provide access but require an excessive amount of square footage, even at a 6 inch rise.
- Courtroom lifts allow people with limited mobility to fulfill their obligations in court like anyone else. Equal justice under the law.
- Courtroom lifts also provide access to the judge's bench and clerk station.
- Adaptability Packages allow non-public elevated courtroom stations to be prepared for future accessibility via a courtroom lift and reduce the cost of future construction.



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