

For the Nuclear Regulatory Commission.
Darrell G. Eisennut,
*Director, Division of Licensing, Office of
 Nuclear Reactor Regulation.*

[FR Doc. 82-2026 Filed 1-26-82; 8:45 am]
 BILLING CODE 7590-01-M

[Docket Nos. 50-266 OLA and 50-301 OLA]

**Wisconsin Electric Power Co. (Point
 Beach Nuclear Plant, Units 1 and 2);
 Oral Argument**

Notice is hereby given that, in accordance with the Appeal Board's Order of January 20, 1982, oral argument on the appeal of the intervenor, Wisconsin's Environmental Decade, from the November 5, 1981 Memorandum and Order of the Licensing Board in this license amendment proceeding will be heard at 10:00 a.m. on Wednesday, February 10, 1982, in the NRC Public Hearing Room, Fifth Floor, East-West Towers Building, 4350 East-West Highway, Bethesda, Maryland.

Dated: January 20, 1982.

For the Appeal Board.

C. Jean Shoemaker,
Secretary to the Appeal Board.

[FR Doc. 82-2027 Filed 1-26-82; 8:45 am]
 BILLING CODE 7590-01-M

**SECURITIES AND EXCHANGE
 COMMISSION**

[Release No. 22365; (70-6306)]

**Consolidated Natural Gas Co.;
 Proposed Extension of Period To
 Issue Common Stock Under Dividend
 Reinvestment Plan and Employee
 Stock Ownership Plan; Exception From
 Competitive Bidding**

January 19, 1982.

The Consolidated Natural Gas Company ("Consolidated"), 100 Broadway, New York, New York 10005, a registered holding company, has filed with this Commission a post-effective amendment to its declaration previously filed and amended pursuant to sections 6(a), 7 and 12(c) of the Public Utility Holding Company Act of 1935 ("Act") and Rules 42 and 50(a)(5) promulgated thereunder.

By order of June 7, 1979 (HCAR No. 21089), Consolidated was authorized to issue and sell 1,000,000 shares of common stock, \$8 par value, from time to time through December 31, 1981, to the agent for Consolidated's common

stockholders participating in its dividend reinvestment plan ("DRP Plan") and to the Trustees of the employee stock ownership plan ("ESOP Plan") of Consolidated and its participating subsidiaries.

By post-effective amendment Consolidated requests that the period authorized by the order of June 7, 1979 (HCAR No. 21089) for common stock issuance be extended to December 31, 1983 for the 899,978 shares remaining unissued.

Under the Economic Recovery Tax Act of 1981 ("ERTA") a domestic public utility company may establish a plan for issuance of qualified stock under which a shareholder shall have the right to receive dividends in cash (which will be taxable in the year of receipt) or dividends in stock (the tax on which will be deferred). Consolidated's common stock is qualified under ERTA. For the calendar years 1982-1985, an individual electing to receive a stock dividend may exclude annually from his tax return up to \$750 (\$1,500 in the case of a joint return) of the value of the stock dividend received. However, the shares received as dividends must be newly issued common stock, and the number of shares distributed to a shareholder must be determined by reference to a value not less than 95% nor greater than 105% of the value of the stock during the period immediately preceding the distribution date. Consolidated intends to issue new common stock, particularly under its DRP plan, because based upon past experience Consolidated earns a greater net return from sales under its DRP and ESOP Plans than from public sale and its stockholders receive tax benefits.

Consolidated seeks an exception from the competitive bidding requirements of Rule 50 pursuant to subsection (a)(5) thereof because the nature of the proposed transactions does not require competitive bids to determine the reasonableness of fees and commissions.

The declaration as amended by the post-effective amendment and any amendments thereto are available for public inspection through the Commission's Office of Public Reference. Interested persons wishing to comment or request a hearing should submit their views in writing by February 11, 1982, to the Secretary, Securities and Exchange Commission, Washington, D.C. 20549, and serve a copy on the declarant at the address specified above. Proof of service (by affidavit or, in the case of an attorney at

law, by certificate) should be filed with the request. Any request for a hearing shall identify specifically the issues of fact or law that are disputed. A person who so requests will be notified of any hearing, if ordered, and will receive a copy of any notice or order issued in this matter. After said date, the declaration, as amended by the post-effective amendment or as it may be further amended, may be permitted to become effective.

For the Commission, by the Division of Corporate Regulation, pursuant to delegated authority.

George A. Fitzsimmons,
Secretary.

[FR Doc. 82-1969 Filed 1-26-82; 8:45 am]
 BILLING CODE 8010-01-M

**TAHOE REGIONAL PLANNING
 AGENCY**

**Threshold Carrying Capacities for
 Lake Tahoe Basin, California and
 Nevada; Intent To Prepare an
 Environmental Impact Statement**

The Tahoe Regional Planning Agency will prepare an environmental impact statement for the establishment of environmental threshold carrying capacities for the Lake Tahoe Basin. Environmental threshold carrying capacities will affect the entire Basin including portions of El Dorado and Placer Counties in California and portions of Douglas, Carson City, and Washoe Counties in Nevada. The environmental impact statement will be prepared in accordance with Article VII of Public Law 95-551, and the Tahoe Regional Planning Compact. The establishment of environmental threshold carrying capacities in required by Article V(b) of this Compact.

Thresholds are the decision parameters to be used in updating the Tahoe Regional Plan; they are necessary to maintain significant scenic, recreational, educational, scientific and natural values of the region as well as to maintain public health and safety within the region. Establishment of environmental threshold carrying capacities are therefore the steps in revising the long-range plan for the Lake Tahoe Basin; they establish the scope of the process by requiring each alternative to maintain its adopted environmental threshold.

Public notice will be given of meetings to explain this process and to determine

the scope of interest in the threshold capacity evaluations. In addition, there will be periodic open meetings of a steering committee to be appointed by the Governing Body of the Agency to oversee this process. Public notice will also be given to these meetings. Written comments and suggestions concerning the planning process may be submitted to the Agency. They should be received by February 1, 1982.

The resulting environmental impact statement will be made available for a 60-day public review and comment period beginning in April, 1982. Written comments will be solicited and a public hearing will be conducted during this review period also.

The Governing Board of the Tahoe Regional Planning Agency is ultimately responsible for both the certification of the environmental impact statement and establishment of environmental threshold carrying capacities. Send written comments and requests for further information to: Randy Sheffield, Tahoe Regional Planning Agency, P.O. Box 8896, South Lake Tahoe, California 95731. Phone (916) 541-0249.

Dated: January 18, 1982.

Philip A. Overeynder,
Director, Tahoe Regional Planning Area.

[FR Doc. 82-2056 Filed 1-26-82; 8:45 am]

BILLING CODE 3410-11-M

DEPARTMENT OF THE TREASURY

Office of the Secretary

[Supplement to Department Circular Public Debt Series—No. 1-82]

Series N-1984 Treasury Notes; Interest Rate

January 21, 1982.

The Secretary announced on January 20, 1982, that the interest rate on the notes designated Series N-1984, described in Department Circular—Public Debt Series—No. 1-82 dated January 15, 1982, will be 15 percent. Interest on the notes will be payable at the rate of 15 percent per annum.

Paul H. Taylor,

Fiscal Assistant Secretary.

[FR Doc. 82-2030 Filed 1-26-82; 8:45 am]

BILLING CODE 4810-40-M

VETERANS ADMINISTRATION

Advisory Committee on Health-Related Effects of Herbicides; Meeting

The Veterans Administration gives notice under the provisions of Pub. L. 92-463 that a meeting of the Advisory Committee on Health-Related Effects of Herbicides will be held in Room 119 of the Veterans Administration Central Office, 810 Vermont Avenue, NW,

Washington, DC, on February 25, 1982, at 8:30 a.m. The purpose of the meeting will be to assemble and analyze information concerning toxicological issues which the Veterans Administration needs to formulate appropriate medical policy and procedures in the interest of veterans who may have encountered herbicidal chemicals used during the Vietnam Conflict.

The meeting will be opened to the public up to the seating capacity of the room. Members of the public may direct questions, in writing only, to the Chairman, Barclay M. Shepard, M.D., and submit prepared statements for review by the Committee. Such members of the public may be asked to clarify submitted material prior to consideration by the Committee.

Transcripts of the proceedings and rosters of the Committee members may be obtained from Mr. Donald Rosenblum, Office of the Special Assistant to the Chief Medical Director for Environmental Medicine (102), Room 848, Department of Medicine and Surgery, Veterans Administration Central Office, Washington, DC 20420 (Telephone: (202) 389-5411).

Dated: January 21, 1982.

Robert P. Nimmo,
Administrator.

[FR Doc. 82-1997 Filed 1-26-82; 8:45 am]

BILLING CODE 8320-01-M

Sunshine Act Meetings

Federal Register

Vol. 47, No. 18

Wednesday, January 27, 1982

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

CONTENTS

	Items
Federal Deposit Insurance Corporation	1, 2
Federal Energy Regulatory Commission	3
Federal Reserve Systems	4
Inter-American Foundation	5
National Mediation Board	6
Nuclear Regulatory Commission	7
Occupational Safety and Health Review Commission	8-10

1

FEDERAL DEPOSIT INSURANCE CORPORATION

Notice of Agency Meeting

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that the Federal Deposit Insurance Corporation's Board of Directors will meet in open session at 2:00 p.m. on Monday, February 1, 1982, to consider the following matters:

Summary Agenda: No substantive discussion of the following items is anticipated. These matters will be resolved with a single vote unless a member of the Board of Directors requests that an item be moved to the discussion agenda.

Disposition of minutes of previous meetings.

Applications for Federal deposit insurance:

United Pacific Bank, a proposed new bank, to be located at 419 College Street, Los Angeles, California.

The Wolfeboro Savings Bank, a proposed new bank, to be located at the intersection of Center and Pine Streets, Wolfeboro, New Hampshire.

Application for consent to purchase assets and assume liabilities and establish one branch:

Olympic Bank Everett, Washington, for consent to purchase the assets of and assume the liability to pay deposits made in Bank of Anacortes, Anacortes, Washington, and to establish the sole office of Bank of Anacortes as a branch of the resultant bank.

Recommendations regarding the liquidation of a bank's assets acquired by the Corporation in its capacity as receiver, liquidator, or liquidating agent of those assets:

Case No. 45,073-L—The Hamilton National Bank of Chattanooga, Chattanooga, Tennessee

Case No. 45,077-L—The Hamilton National Bank of Chattanooga, Chattanooga, Tennessee

Memorandum and Resolution re: State Bank of Clearing, Chicago, Illinois

Memorandum and Resolution re: South Side Bank, Chicago, Illinois

Recommendation regarding First Pennsylvania Bank N.A., Bala-Cynwyd, Pennsylvania, and First Pennsylvania Corporation, Philadelphia, Pennsylvania.

Memorandum re: Mileage rates paid to Corporation employees.

Reports of committees and officers:

Minutes of the actions approved by the Committee on Liquidations, Loans and Purchases of Assets pursuant to authority delegated by the Board of Directors.

Reports of the Division of Bank Supervision with respect to applications or requests approved by the Director or Associate Director of the Division and the various Regional Directors pursuant to authority delegated by the Board of Directors.

Report of the Director, Division of Bank Supervision:

Memorandum re: Report of Actions Taken Under Delegated Authority re: First Pennsylvania Bank, Bala-Cynwyd, Pennsylvania, and First Pennsylvania Corporation, Philadelphia, Pennsylvania.

Discussion Agenda:

No matters scheduled.

The meeting will be held in the Board Room on the sixth floor of the FDIC Building located at 550 17th Street, N.W., Washington, D.C.

Requests for information concerning the meeting may be directed to Mr. Hoyle L. Robinson, Executive Secretary of the Corporation, at (202) 389-4425.

Dated: January 25, 1982.

Federal Deposit Insurance Corporation.

Hoyle L. Robinson,
Executive Secretary.

[S-118-82 Filed 1-25-82; 3:19 pm]

BILLING CODE 6714-01-M

2

FEDERAL DEPOSIT INSURANCE CORPORATION

Notice of Agency Meeting

Pursuant to the provisions of the

"Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that at 2:30 p.m. on Monday, February 1, 1982, the Federal Deposit Insurance Corporation's Board of Directors will meet in closed session, by vote of the Board of Directors pursuant to sections 552b(c)(2), (c)(6), (c)(8), and (c)(9)(A)(ii) of Title 5, United States Code, to consider the following matters:

Summary Agenda: No substantive discussion of the following items is anticipated. These matters will be resolved with a single vote unless a member of the Board of Directors requests that an item be moved to the discussion agenda.

Requests for relief from adjustment for violations of Regulation Z:

Names and locations of banks authorized to be exempt from disclosure pursuant to the provisions of subsections (c)(8) and (c)(9)(A)(ii) of the "Government in the Sunshine Act" (5 U.S.C. 552b(c)(8) and (c)(9)(A)(ii)).

Note.—Some matters falling within this category may be placed on the discussion agenda without further public notice if it becomes likely that substantive discussion of those matters will occur at the meeting.

Recommendations with respect to the initiation, termination, or conduct of administrative enforcement proceedings (cease-and-desist proceedings, termination-of-insurance proceedings, suspension or removal proceedings, or assessment of civil money penalties) against certain insured banks or officers, directors, employees, agents, or other persons participating in the conduct of the affairs thereof:

Names of persons and names and locations of banks authorized to be exempt from disclosure pursuant to the provisions of subsections (c)(6), (c)(8), and (c)(9)(A)(ii) of the "Government in the Sunshine Act" (5 U.S.C. 552b(c)(6), (c)(8), and (c)(9)(A)(ii)).

Note.—Some matters falling within this category may be placed on the discussion agenda without further public notice if it becomes likely that substantive discussion of those matters will occur at the meeting.

Discussion Agenda:

Personnel actions regarding appointments, promotions, administrative pay increases, reassignments, retirements, separations, removals, etc.:

Names of employees authorized to be exempt from disclosure pursuant to the provisions of subsections (c)(2) and (c)(6) of the

"Government in the Sunshine Act" (5 U.S.C. 552b(c)(2) and (c)(6)).

The meeting will be held in the Board Room on the sixth floor of the FDIC Building located at 550 17th Street, N.W., Washington, D.C.

Requests for information concerning the meeting may be directed to Mr. Hoyle L. Robinson, Executive Secretary of the Corporation, at (202) 389-4425.

Dated: January 25, 1982.

Federal Deposit Insurance Corporation.

Hoyle L. Robinson,
Executive Secretary.

[S-119-82 Filed 1-25-82; 3:20 pm]

BILLING CODE 6714-01-M

3

FEDERAL ENERGY REGULATORY COMMISSION

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: 47 FR 3466, January 25, 1982.

PREVIOUSLY ANNOUNCED TIME AND DATE OF MEETING: 10 a.m., January 27, 1982.

CHANGE IN THE MEETING: The following item has been added:

Item No., Docket No., and Company

CAG-25; CP82-10-000, Consolidated Gas Supply Corporation

Kenneth F. Plumb,
Secretary.

[S-120-82 Filed 1-25-82; 3:20 pm]

BILLING CODE 6717-01-M

4

FEDERAL RESERVE SYSTEM

Board of Governors

TIME AND DATE: 10 a.m., Monday, February 1, 1982.

PLACE: 20th Street and Constitution Avenue, NW., Washington D.C. 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Proposed statement to the Subcommittee on Securities of the Senate Committee on Banking, Housing and Urban Affairs regarding Treasury proposals of securities activities of banks and bank holding companies.

2. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.

3. Any items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE

INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board, (202) 452-3204.

Dated: January 25, 1982.

James McAfee,

Assistant Secretary of the Board.

[S-116-82 Filed 1-25-82; 3:10 pm]

BILLING CODE 6210-01-M

5

INTER-AMERICAN FOUNDATION

TIME AND DATE: 9:30 a.m.-3:30 p.m., February 2, 1982.

PLACE: Board Room, Inter-American Foundation, 1515 Wilson Boulevard, Arlington, VA 22209.

STATUS: Open.

MATTERS TO BE CONSIDERED:

1. Chairman's Report.
2. President's Report.
3. Minutes of November 24, 1981 Meeting.
4. Financial Report for FY 1982.
5. The Inter-American Foundation in Guatemala.
6. The Inter-American Foundation in Colombia.

CONTACT PERSON FOR MORE

INFORMATION: Lawrence E. Bruce, Jr. (703) 841-3812.

[S-114-82 Filed 1-25-82; 10:15 am]

BILLING CODE 7025-01-M

6

NATIONAL MEDIATION BOARD.

TIME AND DATE: 2 p.m., Wednesday, February 3, 1982.

PLACE: Board Hearing Room, eighth floor, 1425 K Street NW., Washington, D.C.

STATUS: Open.

MATTERS TO BE CONSIDERED:

1. Ratification of Board actions taken by notation voting during the month of January, 1982.
2. Other priority matters which may come before the Board for which notice will be given at earliest practicable time.

SUPPLEMENTARY INFORMATION: Copies of the monthly report of the Board's notation voting actions will be available from the Executive Secretary's office following the meeting.

CONTACT PERSON FOR MORE

INFORMATION: Mr. Rowland K. Quinn, Jr., Executive Secretary; Tel: (202) 523-5920.

Dated: January 25, 1982.

[S-115-82 Filed 1-25-82; 12:36 pm]

BILLING CODE 7550-01-M

7

NUCLEAR REGULATORY COMMISSION

DATE: Week of January 25, 1982 (Revised) and Week of February 1, 1982.

PLACE: Commissioners Conference Room, 1717 H Street, N.W., Washington, D.C.

STATUS: Open/closed.

MATTERS TO BE CONSIDERED: Monday, January 25:

2:00 p.m.:

Discussion of Management-Organization and Internal Personnel Matters (closed meeting) (as announced)

Wednesday, January 27:

10:00 a.m.:

Discussion of Diablo Canyon Report (closed meeting)

2:30 p.m.:

Discussion of Export Licensing Policy (closed meeting) (as announced; time changed)

Thursday, January 28:

10:00 a.m.:

Discussion of Waste Confidence Proceeding (closed meeting) (postponed from January 21, 1982)

3:00 p.m.:

Affirmation/Discussion Session (public meeting) (items revised)

Items to be affirmed and/or discussed:

- a. Revised General Statement of Policy and Procedure for Enforcement Actions (posponed from January 21)
- b. Dr. George V. Taplin's Petition (PRM 35-1) Regarding 10 CFR Part 35, "Human Uses of Byproduct Material"
- c. General License for Mill Tailings in Agreement States

Friday, January 29:

10:00 a.m.:

Discussion of Quality Assurance/Quality Control (public meeting) (as announced)

Tuesday, February 2:

2:00 p.m.:

Briefing on Status of Committee for Review of Generic Requirements (public meeting)

Wednesday, February 3:

10:00 a.m.:

Discussion of Contested Issues in TMI-1 Restart Proceeding (closed meeting)

Thursday, February 4:

10:00 a.m.:

Meeting with FEMA on Rulemaking on Frequency of Exercises (public meeting)

2:00 p.m.:

Briefing by Industry on Plans for Quality Assurance Improvement (public meeting) (approximately 1 1/2 hours)

3:30 p.m.:

Affirmation/Discussion Session (public meeting)

Items to be affirmed and/or discussed:

- a. Proposed Addition on 10 CFR 50.73 Establishing the Licensee Event Report (LER) System
- b. Final Rule for Eliminating Need for Power and Alternative Energy Sources as Issues in OL Proceedings
- c. Amendments to Part 1 and 2 to Implement the Commission's Delegation

- of OL Antitrust Determination to Directors of NRR and NMSS
- d. Petition for Reconsideration and Request for Immediate Suspension of New Safeguards Information Regulations Implementing Section 147 (postponed from January 21)
- e. Diablo Canyon Physical Security—Governor Brown's Request for Public Disclosure of Non-Protection Information

Friday, February 5:

- 10:00 a.m.:
Meeting with ACRS (public meeting)
- 2:00 p.m.:
Briefing on Regulatory Reform Task Force (public meeting)

ADDITIONAL INFORMATION: By a vote of 5-0 on January 21, 1982, the Commission determined pursuant to 5 U.S.C. 552b(e)(1) and 9.107(a) of the Commission's Rules, that Commission business required that Discussion of Enforcement Matter (closed meeting) and, by a vote of 4-0 (Commissioner Roberts not present), that affirmation of FOIA Appeal (81-A-18C) Regarding Military Functions Rule, held that day be held on less than one week's notice to the public.

AUTOMATIC TELEPHONE ANSWERING SERVICE FOR SCHEDULE UPDATE: (202) 634-1498. Those planning to attend a meeting should reverify the status on the day of the meeting.

CONTACT PERSON FOR MORE INFORMATION: Gary M. Gilbert, (202) 634-1410.

January 21, 1982.

Gary M. Gilbert,
Office of the Secretary
[S-117-82 Filed 1-25-82; 3:19 pm]
BILLING CODE 7590-01-M

8

OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION

TIME AND DATE: 10 a.m. on February 4, 1982.

PLACE: Room 1101, 1825 K Street, NW., Washington, D.C.

STATUS: Because of the subject matter, it is likely that this meeting will be closed.

MATTERS TO BE CONSIDERED: Discussion of specific cases in the Commission adjudicative process.

CONTACT PERSON FOR MORE INFORMATION: Mrs. Patricia Bausell, (202) 634-4015.

Dated: January 22, 1982.
[S-111-82 Filed 1-22-82; 4:16 pm]
BILLING CODE 7600-01-M

9

OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION

TIME AND DATE: 10 a.m. on February 11, 1982.

PLACE: Room 1101, 1825 K Street, NW., Washington, D.C.

STATUS: Because of the subject matter, it is likely that this meeting will be closed.

MATTERS TO BE CONSIDERED: Discussion of specific cases in the Commission adjudicative process.

CONTACT PERSON FOR MORE INFORMATION: Mrs. Patricia Bausell, (202) 634-4015.

Dated: January 22, 1982.
[S-112-82 Filed 1-22-82; 4:16 pm]
BILLING CODE 7600-01-M

10

OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION

TIME AND DATE: 10 a.m. on February 18, 1982.

PLACE: Room 1101, 1825 K Street, NW., Washington, D.C.

STATUS: Because of the subject matter, it is likely that this meeting will be closed.

MATTERS TO BE CONSIDERED: Discussion of specific cases in the Commission adjudicative process.

CONTACT PERSON FOR MORE INFORMATION: Mrs. Patricia Bausell, (202) 634-4015.

Dated: January 22, 1982.
[S-113-82 Filed 1-22-82; 4:16 pm]
BILLING CODE 7600-01-M

United States Department of Transportation

**Wednesday
January 27, 1982**

Part II

Architectural and Transportation Barriers Compliance Board

**Minimum Guidelines and Requirements
for Accessible Design; Amendment to
Final Rule and Notice of Proposed
Rulemaking**

ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD

36 CFR Part 1190

Minimum Guidelines and Requirements for Accessible Design

AGENCY: Architectural and
Transportation Barriers Compliance
Board.

ACTION: Amendment to final rule.

SUMMARY: The Architectural and Transportation Barriers Compliance Board amends its Minimum Guidelines and Requirements for Accessible Design (36 CFR Part 1190) scoping and technical regulations insofar as the rule relates to telephones and related equipment (36 CFR 1190.31(q) Telephones, and § 1190.210 Telephones). The revisions provide requirements on the number, location, and technical specifications for accessible public telephones and related equipment. The revisions also include conforming and clarifying amendments to the regulation's human data text and illustrations (§ 1190.40 Human Data).

EFFECTIVE DATE: February 26, 1982.

ADDRESS: U.S. Architectural and Transportation Barriers Compliance Board, 330 C Street, S.W., Room 1010, Switzer Building, Washington, D.C. 20202.

FOR FURTHER INFORMATION CONTACT: For information on the applicability, scoping and technical provisions of these amendments, contact: Sally Free, Office of Technical Services (202) 472-2700 (voice) or (202) 245-1801 (TDD); Susan Stoessel, Office of Compliance and Enforcement (202) 472-3237 (voice); or Charles Goldman, General Counsel (202) 245-1801 (voice or TDD).

Copies of the amendments are available on tape for those with visual impairments. These may be obtained at the Board offices.

SUPPLEMENTARY INFORMATION:

A. Background

Section 502 of the Rehabilitation Act of 1973, Pub. L. 93-112, 29 U.S.C. 792, established the Architectural and Transportation Barriers Compliance Board (ATBCB or Board) to insure compliance with standards issued under the Architectural Barriers Act of 1968 (Pub. L. 90-480) (42 U.S.C. 4151 *et seq.*), as amended. The Board consists of eleven Federal agency members plus eleven members appointed by the President from the general public.¹

On January 6, 1981, the Architectural and Transportation Barriers Compliance Board adopted as a final rule its "Minimum Guidelines and Requirements for Standards for Accessibility and Usability of Federal and Federally-Funded Buildings and Facilities by Physically Handicapped Persons" (Minimum Guidelines and Requirements for Accessible Design or guidelines and requirements). These guidelines and requirements were issued pursuant to the Rehabilitation Comprehensive Services and Developmental Disabilities Amendments of 1978, amending the Rehabilitation Act of 1973, Pub. L. 93-112, codified at 29 U.S.C. 792, and were published in the *Federal Register* on January 16, 1981 (46 FR 4270). The guidelines and requirements provide a basis for the issuance of consistent and improved accessibility standards by four Federal standard-setting agencies: General Services Administration (GSA), Department of Defense (DOD), Department of Housing and Urban Development (HUD), and the United States Postal Service (USPS), under the Architectural Barriers Act of 1968, as amended (42 U.S.C. 4151 *et seq.*)²

A Notice of Intent on the guidelines and requirements was published in the *Federal Register* on February 22, 1980 (45 FR 12167), and a Notice of Proposed Rulemaking (NPRM) was published in the *Federal Register* on August 18, 1980 (45 FR 55101). A draft regulatory analysis, prepared in accordance with Executive Order 12044, was published in the August 18, 1980, *Federal Register* for comment along with the NPRM. The Final Rule was published in the *Federal Register* on January 16, 1981. These documents as well as other information used as the basis for the rule are available for inspection at the ATBCB offices.

On July 10, 1981, the ATBCB determined to publish in the *Federal Register* a notice proposing amendments to the telephone provisions (see 49 FR 39764, August 4, 1981, ATBCB Docket Number 81-G-2). A second notice proposing rescission of the guidelines and requirements was also published in

that same *Federal Register*. For further information on Board actions concerning the notice proposing rescission and subsequent actions taken by the Board on the guidelines and requirements, see the notice of proposed rulemaking published elsewhere in this *Federal Register*.

At its December 1981 Board meeting, the ATBCB adopted as a final rule the amendments proposed at 49 FR 39764 on August 4, 1981, addressing scoping and technical requirements for public telephones and related equipment. The Board believes that these amendments to the rule resolve questions on specific issues raised concerning these requirements and, therefore, decided to publish these amendments separately from the rulemaking concerning other portions of the guidelines and requirements.

B. Overview of the Amendments

Amendments to the scoping provisions of the final rule provide that if one or more public telephones are provided and installed as single units or if two or more telephones are installed in a bank of telephones on any floor, then there shall be at least one accessible telephone on each floor where public telephones are provided. Accessible telephones must meet the requirements of § 1190.210 and can be either side-reach telephones with the highest operable part mounted at a maximum of 4'-6" or forward-reach telephones with the highest operable part mounted at a maximum of 4'-0". If two or more banks of telephones are provided on any floor, then it is required that at least one accessible telephone per floor be mounted with the highest operable part at a maximum of 4'-0". The installer must provide at least one accessible telephone—mounted at either 4'-0" or 4'-6"—in proximity to each bank. The accessible public telephone does not have to be attached to the bank as long as it is in proximity to the bank of telephones.

The telephone companies and enclosure manufacturers pointed out that the equipment provided for exterior installations is technically different from interior installations and, as a result, difficulties are encountered in providing adequate service if the 4'-0" mounting height is used for some exterior telephones. As a result, the Board includes an exception for exterior public telephones for areas which do not have dial-tone-first service. For these areas only, the forward reach 4'-0" telephone is not required.

¹ The agency members are the heads or their designees (Executive Level IV or above) of the

Departments of Education; Transportation; Health and Human Services; Housing and Urban Development; Labor; Interior; Justice; Defense; General Services Administration; Veterans Administration; United States Postal Service. The Act requires at least five of the members from the general public to be physically handicapped.

² Standards issued under the Architectural Barriers Act and currently in effect are: GSA: 41 CFR 101-19.6, effective September 2, 1969, revised October 14, 1980 (45 FR 67664); HUD: 24 CFR Part 40, effective September 2, 1969; DOD: DOD 4279.1-M "Construction Criteria," June 1, 1978, paragraph 5-6; USPS: Postal Service Contracting Manual, Publication 41, § 18-518.4, 39 CFR 601.100 as amended by handbook RE-4, November 1979.

The requirement for volume controls remains unchanged from the rule issued January 6, 1981, except that language has been added encouraging the installation of additional volume controls. A paragraph requiring that signage directing persons to accessible telephones has also been added.

The technical portions for Human Data (§ 1190.40) and Telephones (§ 1190.210) are closely related; thus, if revisions in the technical provisions occur in one section, changes may also occur in the other. For example, a 10" maximum distance is not permitted between the wheelchair and the object to be reached (Figure 4.17). These changes are also reflected in Figures 21.1 and 21.2 that appear in § 1190.210 Telephones. The amendments were made based on a 1975 Dreyfus study and on comments submitted by the telephone industry.

A maximum 2'-0" depth is allowed for alcoves that are 2'-6" wide because a wheelchair user entering an alcove that is deeper than 2'-0" may experience significant problems getting out of that space (§ 1190.40(c)(5) and Figures 4.8, 4.9, 4.10, and 4.11). Alcoves requiring the use of a clear floor space deeper than 2'-0" must have a 3'-0" opening. Telephone equipment manufacturers were concerned as to the effects this requirement would have on the design of telephone enclosures. On examination of this provision, it was determined that the original requirements did not necessarily prohibit the use of a 2'-6" opening if the alcove was over 2'-0" in depth. Since such objects as telephones mounted in the alcove can protrude 6" from the wall opposite the alcove's entrance, the actual clear floor space that the wheelchair user requires becomes 2'-0" deep rather than 2'-6". A note clarifying paragraph 1190.40(c), along with changes to Figure 21.3, has been included in the final rule.

Two new figures (4.12 and 4.13) and explanatory text were added to the human data section to clarify reach limitation for wheelchair users. These provisions were also based upon dimensions found in the 1975 Dreyfus study and other well accepted research data establishing the 4'-0" and 4'-6" reach requirements.

Technical provisions at § 1190.210(d) in the telephone sections were revised to clarify that mounting height is based on the location of the highest operable parts which are essential to the basic operation of the telephone. The revision was necessary to include such technology as the dial-tone-first or the credit card call situation. A note has also been added to Figures 21.4 and 21.5 to reflect this clarification.

Figure 21.4 in § 1190.210 was revised to reflect that any width is permissible for the side reach telephone enclosure since clear floor space and minimum shelf height requirements specified by Figure 21.1 and 1190.40 will allow access to the telephone. It should also be noted that this clear floor or ground space is required to be positioned so that an object, such as a telephone, can be reached from a wheelchair (see Figure 4.12, and 4.13) and that it is permissible for this clear floor space to overlap the clear space required for other objects (1190.40)(c)).

C. Analysis of Comments

Sixty-three responses were included in the ATBCB Docket Number 81-G-2. Respondents included the following: Two Board members (GSA and USPS); eleven State and local government agencies; fifteen handicapped organizations including six representing hearing impaired and deaf individuals; six veterans organizations (all representing Paralyzed Veterans of America); one code organization, National Conference of States on Building Codes and Standards, Inc.; three industries; six education-affiliated organizations; and eleven individual responses. Three duplicate responses and four responses that did not directly address the proposed rulemaking, were also received.

Twenty-eight respondents were generally supportive of the proposed amendments. General Telephone & Electronics (GTE), American Telephone and Telegraph (AT&T) and the Committee of Independent Telephone Enclosure Manufacturers were all complimentary of the Board's efforts and willingness to respond to concerns raised by the industry. GTE said that the Board has struck a proper balance between accessibility and cost-effectiveness.

Eight respondents opposed the proposed amendments, with all except one of these comments recommending the use of the telephone provisions in ANSI A117.1-1980. Five of those recommending ANSI represented chapters of the Paralyzed Veterans of America. United States Postal Service and the General Services Administration opposed the revisions due to the then pending rescission notice and recommended ANSI. At the Board meeting on December 1, 1981, these concerns were discussed and resolved.

Nine respondents addressed the need for accessible telephones and made various recommendations. Five respondents were especially concerned with providing equipment for hearing impaired and deaf persons and strongly

recommended the inclusion of volume controls and TDD's in the regulation.

Six respondents, including the California State University at Northridge and the Arkansas Department of Human Services, expressed a preference for the more stringent provisions contained in the January 1981 final rule.

Copies of these comments are available for inspection at the Board's office.

D. Executive Order 12291 and Regulatory Flexibility Act

This amendment to the final rule has been reviewed under procedures established in Executive Order 12291 and has been designated as a "non-major rule."

The Architectural and Transportation Barriers Compliance Board has concluded that the rule will not have a significant economic impact on a substantial number of small entities and that the requirement of the Regulatory Flexibility Act, Pub. L. 96-354, for a regulatory flexibility analysis is not applicable. The ATBCB rule directly impacts four Federal agencies—the General Services Administration, Department of Housing and Urban Development, Department of Defense, and United States Postal Service—who are to issue standards in accordance with the Architectural Barriers Act of 1968. Final determination of possible effect, if any, on recipients of Federal construction funds and on small businesses will be made at the time the standards based on these guidelines and requirements are issued by these standard-setting agencies.

In conclusion of the foregoing, Part 1190 of Title 36 of the Code of Federal Regulations is amended to read as set forth below.

Dated: December 1, 1981.

By vote of the Board.

Mason H. Rose, V,
Chairperson, Architectural and
Transportation Barriers Compliance Board.
Wm. Bradford Reynolds,
Vice Chairperson, Architectural and
Transportation Barriers Compliance Board,
and Assistant Attorney General for Civil
Rights.

1. § 1190.31(q) is amended by revising it to read as follows:

§ 1190.31 Accessible buildings and facilities: New construction.

* * * * *

(q) Telephones. (1) If public telephones are provided, then accessible public telephones shall comply with § 1190.210, Telephones, and the following table:

Number of public telephones provided on each floor	Number of telephones required to be accessible ¹
1 or more single unit installations.	1 per floor.
1 bank ² .	1 per floor.
2 or more banks ² .	1 per bank. Accessible unit may be installed as a single unit in proximity (either visible or with signage) to bank. At least one public telephone per floor shall meet the requirements for a forward reach telephone. ³

¹ Additional public telephones may be installed at any height; however, the installation of accessible telephones is strongly recommended. Unless otherwise specified, accessible telephones may be either forward reach or side reach telephones.

² A bank consists of two or more adjacent public telephones usually installed as a unit.

³ Exception for exterior installations only: If dial-tone-first service is not available, then a side reach telephone may be installed instead of the required forward reach telephone (i.e., one telephone in proximity to each bank shall meet the requirements of § 1190.210, Telephones).

(2) At least one of the public telephones complying with § 1190.210, Telephones, shall be equipped with a volume control. The installation of additional volume controls is encouraged and these may be installed on any public telephone provided.

(3) Signage complying with § 1190.220, Signage, shall be provided at public telephones and shall direct persons to public telephones complying with § 1190.210, Telephones.

2. § 1190.40 is amended by revising the text of paragraph (c)(5) (excluding Figures 4.8 through 4.11) and the introductory text of paragraphs (d) and (d)(1); adding Figures 4.12 and 4.13 and inserting them following the revised introductory text of paragraph (d); and redesignating old Figures 4.12, 4.13, 4.14, 4.15, and 4.16 as Figures 4.14, 4.15, 4.16, 4.17, and 4.18.

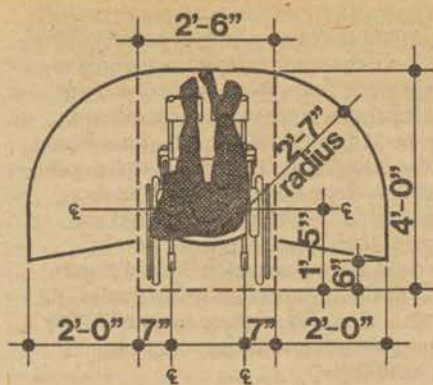
§ 1190.40 Human Data

* * *

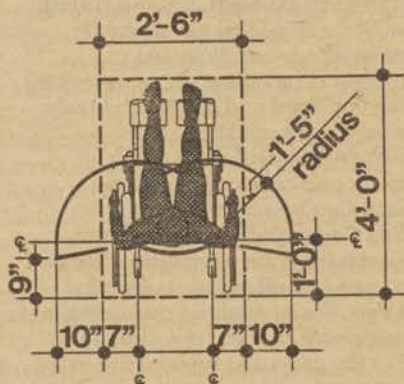
(c) * * *

(5) If clear floor or ground space is confined or restricted on all or part of three sides, provide additional maneuvering space adjoining clear floor or ground space as shown in Figures 4.8, 4.9, 4.10, and 4.11. For example, a 2'-6" depth is satisfactory for a telephone enclosure that is 2'-6" square since the telephone protrudes from the wall 6" and thus reduces the actual depth of the "alcove" to 2'-0".

(d) *Reach limitations for wheelchair users.* Reach limitations for wheelchair users is a function of the mounting height of the object being reached and the distance the object is from the user (figs. 4.12 and 4.13).



reach range 4.12
objects 4'-0" high max.

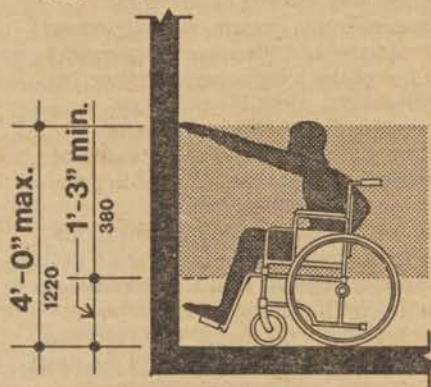


reach range 4.13
objects 4'-6" high max.

(1) Forward reach to surface mounted object:

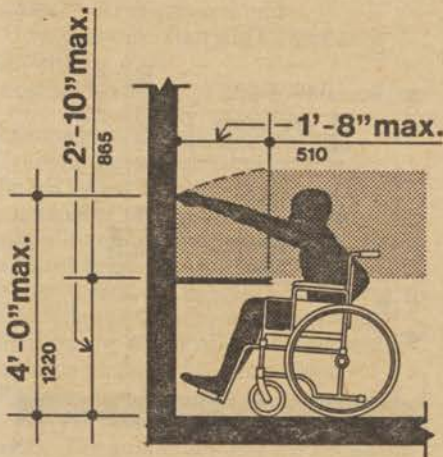
(i) Maximum height of reach for a forward approach shall be 4'-0" (1,220 mm) (fig. 4.14)

(ii) Minimum height of reach for a forward approach shall be 1'-3" (380 mm) (fig. 4.14).



forward reach 4.14

(iii) Maximum height of reach for a forward approach over an obstruction shall comply with figures 4.15 and 4.16.



**reach over
obstacle**

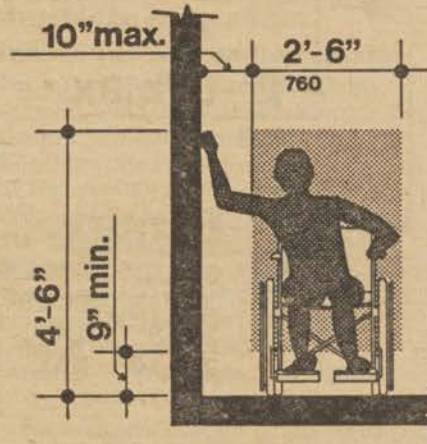
forward approach

4.
15

(2) Side reach (parallel approach):

(i) Maximum height of reach for a parallel approach shall be 4'-6" (1,370 mm) (fig. 4.17).

(ii) Minimum height of reach for a parallel approach shall be 9 inches (230 mm) (fig. 4.17).



side reach

parallel approach

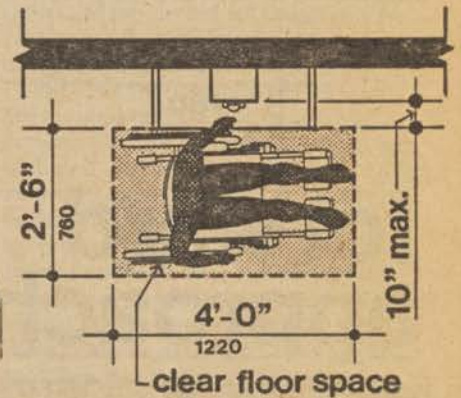
4.
17

(iii) Maximum height of reach for a side approach over an obstruction shall comply with figure 4.18.

3. § 1190.210 is amended by redesignating paragraphs (c) as (d) and (d) as (e); adding a new paragraph (c); revising figures 21.1, 21.2, and 21.3 and inserting them following new paragraph (c); revising newly designated (d)(1), inserting figures 21.4 and 21.5 and inserting them following paragraph (d)(1); and removing figure 21.6 as follows:

§ 1190.210 Telephones.

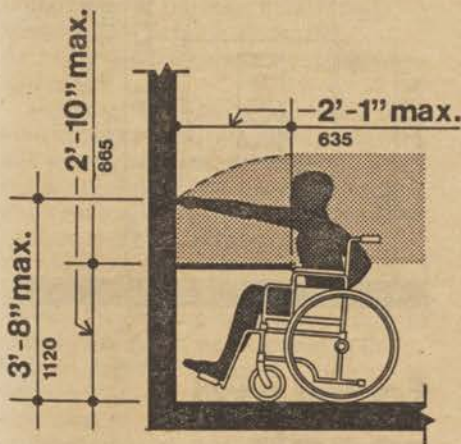
(c) *Protruding Objects.* Telephones shall comply with § 1190.50 (c), Protruding objects.



**parallel
approach**

telephone enclosures

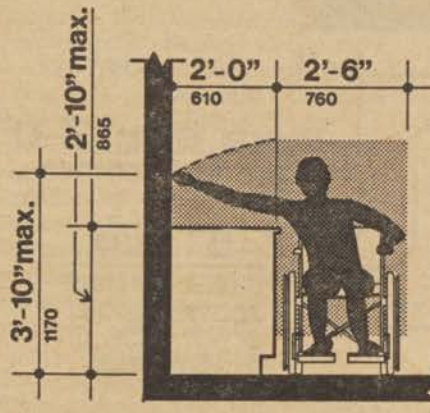
21.
1



**reach over
obstacle**

forward approach

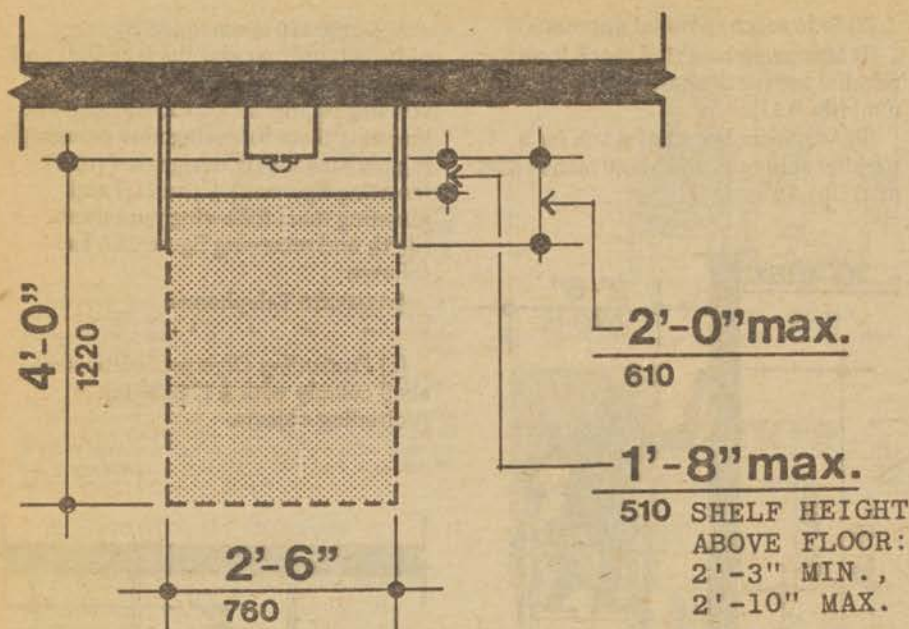
4.
16



**reach over
obstruction**

parallel approach

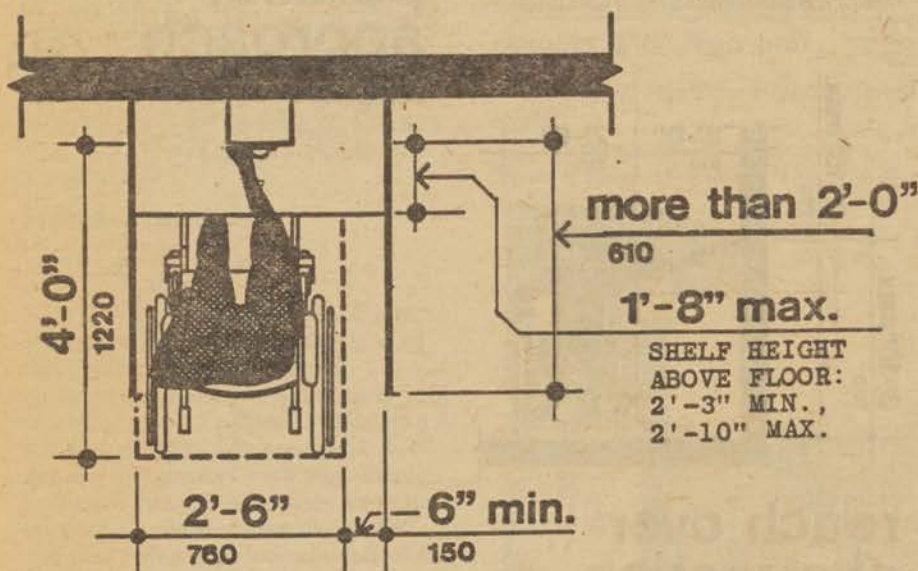
4.
18



forward approach

telephone enclosures

21.
2



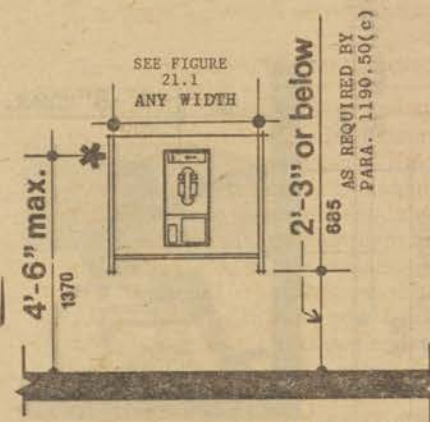
forward approach

telephone enclosures

21.
3

(d) *Equipment characteristics.*
Telephone equipment shall:

(1) Have the highest operable parts which are essential to the basic operation of the telephone located at a maximum of 4'-6" (1370 mm) above finish floor for side reach (fig. 21.4) and at a maximum of 4'-0" (1220 mm) above finish floor for forward reach.

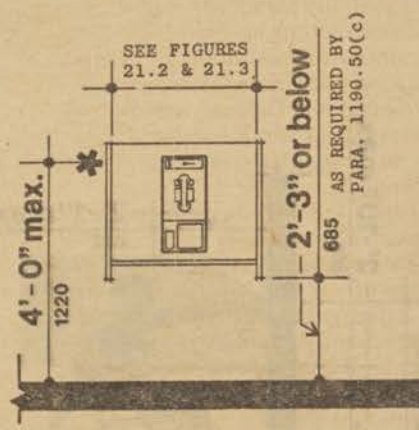


side reach

telephone enclosures

21.
4

*Highest operable parts which are essential to the basic operation of the telephone.



forward reach

telephone enclosures

21.
5

*Highest operable parts which are essential to the basic operation of the telephone.

ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD

36 CFR Part 1190

[ATBCB Docket Number 81-G-3]

Minimum Guidelines and Requirements for Accessible Design

AGENCY: Architectural and
Transportation Barriers Compliance
Board.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Architectural and Transportation Barriers Compliance Board issues a notice of proposed rulemaking to amend its minimum guidelines and requirements (guidelines and requirements) for standards for accessibility and usability of Federal and federally-funded buildings and facilities by physically handicapped persons published in the *Federal Register* as a final rule on January 16, 1981 (46 FR 4270, codified at 36 CFR Part 1190). The guidelines and requirements and this notice of proposed rulemaking are issued pursuant to the Rehabilitation, Comprehensive Services, and Developmental Disabilities Amendments of 1978, amending the Rehabilitation Act of 1973, Pub. L. 93-112. The guidelines and requirements provide a basis for the issuance of consistent and improved accessibility and usability standards issued by four standard setting agencies, the General Services Administration, Department of Housing and Urban Development, Department of Defense, and United States Postal Service, under the Architectural Barriers Act of 1968, as amended.

The Board intends by this action to amend the existing minimum guidelines and requirements so that they provide ready access and use, yet are more cost effective and consistent with other Federal and nationally recognized standards. A final rule consistent with this purpose may eliminate any need to rescind the existing minimum guidelines and requirements, as proposed in the *Federal Register* of August 4, 1981 (Docket 81-G-1) and in the notice of extension of comment period published on September 29, 1981. Each comment received in response to ATBCB Docket 81-G-1 will be included and evaluated as a response to this rulemaking (ATBCB Docket 81-G-3).

DATE: Written comments must be received or postmarked on or before March 15, 1982.

ADDRESS: Written comments should be submitted to the Docket Officer, ATBCB Rulemaking Docket Number 81-G-3, Architectural and Transportation

Barriers Compliance Board, Room 1014, 330 C Street, SW., Washington, D.C. 20202. Comments received will be available for public inspection in room 1014 from 9 a.m. to 5:30 p.m., Monday through Friday. To inspect the docket, contact Mr. Larry Allison, Director of Public Information, Room 1014, 330 C Street, S.W., Washington, D.C. 20202; 202/245-1591 (voice or TDD).

FOR FURTHER INFORMATION CONTACT:

For information on the applicability, scoping, and technical provisions of the Board's Minimum Guidelines and Requirements for Accessible Design (36 CFR Part 1190) and on this Notice of Proposed Rulemaking (NPRM) contact Ms. Sally Free, Office of Technical Services, Room 1014, 330 C Street, SW., Washington, D.C. 20202; (202) 472-2700 (voice) or Mr. Charles D. Goldman, General Counsel, Room 1010, 330 C Street, SW., Washington, D.C. 20202; (202) 245-1801 (voice or TDD).

For additional copies of this NPRM or of the ATBCB Minimum Guidelines and Requirements for Accessible Design (36 CFR 1190), contact Ms. Diane Pernick, Office of Public Information, Room 1014, 330 C Street, SW., Washington, D.C. 20202; (202) 245-1591 (voice or TDD). Copies of this NPRM and the Guidelines and requirements are available on tape for those with visual impairments. These documents may be obtained at the above address or by contacting Ms. Pernick.

SUPPLEMENTARY INFORMATION: On January 6, 1981, the Architectural and Transportation Barriers Compliance Board (ATBCB or the Board) adopted as a final rule its "Minimum Guidelines and Requirements for Standards for Accessibility and Usability of Federal and Federally Funded Buildings and Facilities by Physically Handicapped Persons (Minimum Guidelines and Requirements for Accessible Design or guidelines and requirements). These guidelines and requirements were issued pursuant to the Rehabilitation, Comprehensive Services and Developmental Disabilities Amendments of 1978, Pub. L. 93-112, codified at 29 U.S.C. 792, and were published in the *Federal Register* on January 16, 1981 (46 FR 4270). The guidelines and requirements are to provide a basis for the issuance of consistent and improved accessibility standards by four Federal standard-setting agencies: General Services Administration (GSA), Department of Defense (Defense), Department of Housing and Urban Development (HUD), and the United States Postal Service (USPS), under the Architectural Barriers Act of 1968, as amended (42

U.S.C. 4151, *et seq.*).

On July 10, 1981, the ATBCB determined to publish in the *Federal Register* a notice proposing rescission of its January 6, 1981, Minimum Guidelines and Requirements for Accessible Design (46 FR 39764, August 4, 1981; ATBCB Docket 81-G-1) and the development of alternative minimum guidelines and requirements, as well as to publish a notice of proposed rulemaking regarding the regulation's scoping and technical provisions for accessible telephones (46 FR 39764, August 4, 1981; ATBCB Docket 81-G-2). Because several Senators, Congressmen, individuals, and organizations requested additional time for the submission of comments to ATBCB Docket 81-G-1, the Board extended the period for comments to November 6, 1981. In the notice extending the comment period, the Board identified portions of its January, 1981, regulations in which specific comments were requested. Such items included parking and passenger loading zones, entrances, elevators, toilet and bathing facilities, alarms, listening systems, additions, alterations, leases, special use facilities, and residential structures. The Board emphasized that it sought public comments on all parts of the guidelines and requirements and specifically asked for comments on which sections of this regulation should be retained, which sections should be modified, and which sections should be reserved. The Board also requested comments on the clarity and format of the regulation.

For background on the Architectural and Transportation Barriers Compliance Board's current guidelines and requirements, including the overview and section-by-section analysis of the current guidelines and requirements, see the Preamble at 46 FR 4270 (Jan. 16, 1981), codified at 36 CFR Part 1190, Preamble A.

Amendments are proposed to Subpart A—General, Subpart C—Scoping, and Subpart D—Technical. Amendments to the guidelines and requirements' technical provisions (Subpart D) are proposed in order to reduce the number of differences between the Board's guidelines and requirements and the American National Standard Institute Standard "Specifications for making Buildings and Facilities Accessible and Usable by Physically Handicapped Persons" (ANSI A117.1 (1980) or ANSI). Where such differences remain, the Board's guidelines and requirements are in all material respects similar to the draft proposed Uniform Federal Standards as developed by the Uniform Task Force established at the request of the Director, Office of Management and

Budget. The General Services Administration, the Department of Housing and Urban Development, the United States Postal Service, and the Department of Defense—the four voting members of the Uniform Task Force—are working toward adopting a uniform federal standard as their required Architectural Barriers Act standards.

Subparts C and D present generic specifications for application to general building types intended for public or common use. Subpart E, Special Building or Facility Types or Elements, continues to be reserved for future development by the ATBCB. With regard to housing, said development will be consistent with the accessibility requirements currently contained in HUD's Minimum Property Standards and 24 CFR Part 40. The proposed Uniform Federal Accessibility Standard now under development will address special building and facility types and elements and will provide a basis for future development of the reserve Subpart E.

The text of the proposed changes to the guidelines and requirements use ► arrows to indicate additions and [] brackets to indicate deletions. Proposed technical changes to Subpart D are highlighted in italics in addition to using the arrows and brackets. The equivalent ANSI technical provision is noted in the margin and under appropriate figures. Technical provisions and definitions contained in the guidelines and requirements but not found in ANSI are underlined. An asterisk (*) in the left margin notates a provision on which the Board requests public comment on a specific question or alternative. For information on ATBCB provisions which are proposed to remain unchanged, see the preamble at 46 FR 4270 (Jan. 16, 1981). A detailed analysis of the final rule will be published with the rule.

It is recognized that any of the requirements embodied in the standard based on the proposed amendments are subject to the waiver and modification provisions of section 6 of the

Architectural Barriers Act, 42 U.S.C. 4156.

The proposed amendments respond to concerns registered by certain Board members and to issues raised in comments submitted to ATBCB Docket 81-G-1 (notice of proposed rulemaking proposing rescission of minimum guidelines and requirements) and 81-G-2 (notice of proposed rulemaking on elephones).

Three thousand three hundred and sixty-six (3,366) timely comments were received in response to the notice of proposed rulemaking to rescind the guidelines and requirements and to the subsequent notice of extension extending this notice (ATBCB Docket 81-G-1). The overwhelming numerical majority of the responses support having the Board issue minimum guidelines and requirements. A number of comments were received in response to questions posed in the NPRM and in the Notice of Extension. These comments, some of which included helpful substantive proposals to modify the existing guidelines, have been carefully considered in the development of this proposed rulemaking. The minutes of the December 1, 1981, Board meeting, all comments, summaries, and other documents pertaining to this rulemaking are available for inspection at the Board's offices.

At its meeting of December 1, 1981, the Board voted unanimously to issue final amendments to the guidelines and requirements insofar as the regulation relates to telephones and related equipment. The final amendments are published elsewhere in this *Federal Register*. Paragraphs in this instant notice of proposed rulemaking affected by the issuance of the final amendments are noted in the text of this proposed rule.

This proposed rule has been reviewed in accordance with Executive Order 12291 and has been designated as a "major rule" for which the regulatory impact analysis has been waived.

The Architectural and Transportation

Barriers Compliance Board has concluded that the proposed rule will not have a significant economic impact on a substantial number of small entities and that the requirement of the Regulatory Flexibility Act, Pub. L. 96-354, for a regulatory flexibility analysis is not applicable. The Architectural and Transportation Barriers Compliance Board's proposed rule directly impacts four Federal agencies—the General Services Administration, Department of Housing and Urban Development, Department of Defense, and United States Postal Service—who are to issue standards in accordance with the Architectural Barriers Act of 1968. Final determination of possible effect, if any, on recipients of Federal construction funds and on small businesses will be made as these guidelines and requirements are issued by the standard-setting agencies.

The Architectural and Transportation Barriers Compliance Board has also determined that the issuance of the proposed amendments to the minimum guidelines and requirements will not have any significant impact on the environment. National Environmental Policy Act of 1969, as amended, 42 U.S.C. 4232.

Conclusion:

In consideration of the foregoing, it is proposed to revise Part 1190 of Title 36 of the Code of Federal Regulations to read as set forth below, with the exception of certain amendments to §§ 1190.31, 1190.40, and 1190.210 which are adopted as an amendment to a final rule in a document published elsewhere in this *Federal Register*.

Dated: December 1, 1981.

By vote of the Board.

Mason H. Rose, V.

Chairperson, Architectural and Transportation Barriers Compliance Board.

Wm. Bradford Reynolds,

Vice Chairperson, Architectural and Transportation Barriers Compliance Board, and Assistant Attorney General for Civil Rights, Department of Justice.

BILLING CODE 4000-07-M

PART 1190 -- MINIMUM GUIDELINES AND REQUIREMENTS FOR ACCESSIBLE DESIGN

Subpart A--General

§ 1190.1 Purpose. The purpose of this part is to implement Section 502(b)(7) of the Rehabilitation Act of 1973 (29 U.S.C. 792(b)(7)), as amended, which requires the Architectural and Transportation Barriers Compliance Board to establish minimum guidelines and requirements for standards issued under the Architectural Barriers Act of 1968 (42 U.S.C. 4151 *et seq.*), as amended. This part and the standards to be based on it are intended to ensure that certain buildings and facilities financed with Federal funds are so designed, constructed, or altered as to be readily accessible to, and usable by, physically handicapped persons, including those having the inability to walk, difficulty walking, reliance on walking aids, sight and hearing disabilities, incoordination, reaching and manipulation disabilities, lack of stamina, difficulty interpreting and reacting to sensory information, and extremes in physical size.

§ 1190.2 Applicability: Buildings and facilities subject to guidelines and standards.

(a) Definitions. As used in this section, the term:

(1) "Constructed or altered on behalf of the United States" means acquired by the United States through lease-purchase arrangement, constructed or altered for purchase by the United States, or constructed or altered for the use of the United States.

(2) "Primarily for use by able-bodied military personnel" means expected to be occupied, used, or visited principally by military service personnel. Examples of buildings so intended are barracks, officers' quarters, and closed messes.

(3) "Privately owned residential structure" means a single or multi-family dwelling not owned by a unit or subunit of Federal, state, or

local government.

(b) Buildings and facilities covered. Except as provided in paragraph (c) of this section, the guidelines and requirements, and the standards to be issued by the standard-setting agencies to conform to it, apply to any building or facility--

(1) The intended use for which either--

(i) will require that such building or facility be accessible to the public, or

(ii) may result in employment or residence therein of physically handicapped persons; and

(2) Which is--

(i) to be constructed or altered by or on behalf of the United States;

(ii) to be leased in whole or in part by the United States;

(iii) to be financed in whole or in part by a grant or loan made by the United States after August 12, 1968, if the building or facility may be subject to standards for design, construction, or alteration issued under the law authorizing the grant or loan; or

(iv) to be constructed under the authority of the National Capital Transportation Act of 1960, the National Capital Transportation Act of 1965, or Title III of the Washington Metropolitan Area Transit Regulation Compact.

(c) Buildings and facilities not covered. The guidelines and requirements, and the standards do not apply to--

(1) Any privately owned residential structure, unless it is leased by the Federal government on or after January 1, 1977, for subsidized housing programs; or

(2) Any building or facility on a military installation designed and constructed primarily for use by military personnel.

(3) Although the ATBCB has not reviewed in detail the particular program statutes, it recognizes that, as a general rule, buildings purchased or acquired directly by the Government without construction or alteration are not covered by the Architectural Barriers Act.

(d) Effective date of standards. Any covered building or facility, as provided in this section, which is designed, constructed, ▶ or ◀ altered, [or leased] after the effective date of a standard issued under this guideline which is applicable to the building or facility, ▶ and any other building or facility, if and when required by law, subject to the requirements of the Architectural Barriers Act ◀ shall be designed, constructed, ▶ or ◀ altered, [or leased] in accordance with the standard. For purposes of this section, any design, construction, alteration or lease for which bids or offers are received before the effective date of the applicable standards, in response to an invitation for bids or requests for proposals, is not subject to the standard.

§ 1190.3 Definitions. As used in this part, the term:

"ATBCB" means the Architectural and Transportation Barriers Compliance Board.

"Access aisle" means a pedestrian space between elements such as parking spaces, seating, and desks.

"Accessible" means [complying] ▶ compliance ◀ with the specifications and requirements of this part and with any applicable standard issued by a standard-setting agency. ▶ Accessible describes a site, building, facility, or portion thereof that complies with these requirements and that can be approached, entered, and used by physically handicapped persons. Accessible elements and spaces of a building or facility including doors provided immediately adjacent to a turnstile or a revolving door, shall be subject to the same use patterns as other elements and spaces of the building or facility. ◀

"Accessible route" means a continuous unobstructed path connecting accessible elements and spaces in a building or facility and complying with the space and reach requirements of this part. (Interior accessible routes may include but are not limited to corridors, floors, ramps, elevators, lifts, and clear floor space at fixtures.

Exterior accessible routes may include but are not limited to parking access aisles, curb ramps, walks, ramps, and lifts.)

"Accessible space" means a space that complies with this part.

▶ "Adaptability" means the ability of certain building spaces and elements such as toilet facilities and grab bars, to be added to, raised, lowered, or otherwise altered so as to accommodate the needs of either disabled or nondisabled persons, or to accommodate the needs of persons with different types or degrees of disability. ◀

"Addition" means an expansion, extension, or increase in the gross floor area of a building or facility.

"Agency" means a Federal department, agency or instrumentality, as defined in sections 551(1) and 701(b)(1) of Title 5, United States Code, or an official authorized to represent an agency.

"Alteration" means any change in a building or facility or its permanent fixtures or equipment. It includes, but is not limited to, remodeling, renovation, rehabilitation, reconstruction, changes or rearrangement in structural parts, and extraordinary repairs. It does not include normal maintenance, reroofing, interior decoration, or changes to mechanical systems.

"Architectural Barriers Act" means the Architectural Barriers Act of 1968, Pub. L. 90-480, as amended, 42 U.S.C. 4151 et seq.

▶ "Assembly Area" means a room or space accommodating fifty or more individuals for religious, recreational, educational, political, social, or amusement purposes, or for the consumption of food and drink, and including all connected rooms or spaces with a common means of egress and ingress. Such areas as conference and meeting rooms accommodating less than fifty individuals are not considered assembly areas. ◀

"Automatic door" means a door--

- (1) Used for human passage and
- (2) Equipped with a power-operated mechanism and controls that open and

close the door upon receipt of a momentary actuating signal.

"Building" or "facility" means all or any portion of buildings, structures, equipment, roads, walks, parking lots, parks, sites, or other real property or interest in such property.

▶ "Children" means people below the age of twelve (that is, elementary school age and younger). ◀

▶ "Circulation path" means an exterior or interior way of passage from one place to another for pedestrians, including, but not limited to, walks, hallways, courtyards, stairways, stair landings, and elevators. ◀

▶ "Clear" means unobstructed. ◀

"Common use areas" means those interior and exterior spaces available for use by all occupants and users of a building or facility, exclusive of any spaces that are made available for the use of a restricted group of people or the use of which is restricted to particular functions.

"Construction" means any erection of a new building or of an addition to an existing building or facility.

"Cross slope" means the slope that is perpendicular to the direction of travel (see "running slope").

"Curb ramp" means a short ramp cutting through a curb or built up to it.

"Disability" means any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following bodily systems: Neurological; musculoskeletal; special sense organs; respiratory, including speech organs; cardiovascular; reproductive; digestive; genito-urinary; hemic and lymphatic; skin; and endocrine.

"Egress" or "means of egress" means a continuous and unobstructed way of exit travel from any point in a building or facility to an exterior walk or out of a fire zone. It includes all intervening rooms, spaces, or elements.

"Element" means an architectural or mechanical component of a building, facility, space, or site, e.g., telephone, curb ramp, door, drinking fountain, seating, water closet.

"Entrance" means any access point to a building or portion of a building or facility used for the purpose of entering. An entrance includes the approach walk, the vertical access leading to the entrance platform, the entrance platform itself, vestibules if provided, the entry door(s) or gates(s), and the hardware of the entry door(s) or gate(s). ▶ The principal entrance of a building or facility is the main door through which most people enter. ◀

"Essential features" means those elements and spaces that make a building or facility usable by, or serve the needs of, its occupants or users. Essential features include but are not limited to entrances, toilet rooms, and accessible routes. Essential features do not include those spaces that house the major activities for which the building or facility is intended, such as classrooms and offices.

"Exception" means a special provision in this part or in a standard which indicates an acceptable alternative, under specified circumstances, to a requirement stated directly above the exception.

"Executive Director" means the Executive Director of the ATBCB.

"Extraordinary repair" means the replacement or renewal of any element of an existing building or facility for purposes other than normal maintenance.

"Full and fair cash value" is calculated for the estimated date on which work will commence on a project and means--

(1) The assessed valuation of a building or facility as recorded in the assessor's office of the municipality and as equalized at one hundred percent (100%) valuation; or

Note: The one hundred percent (100%) equalized assessed value shall be based upon the state's most recent determination of the particular city's or town's assessment ratio. Example: Town X has an assessment ratio of forty percent (40%), and the particular building in question is assessed at \$200,000.00. To determine the equalized assessed value of this

building, divide \$200,000.00 by .40, and the equalized assessed value equals \$500,000.00.

(2) The replacement cost; or

(3) The fair market value.

"Guidelines and requirements" means this part.

"Operable part" means a part of equipment or an appliance used to insert or withdraw objects, to activate or deactivate equipment, or to adjust the equipment (e.g., coin slot, push button, handle).

"Physically handicapped person" means any person who has a disability which substantially limits one or more major life activity, including but not limited to such functions as performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working.

"Power-assisted door" means a door--

(1) Used for human passage; and

(2) With a mechanism that helps to open the door, or relieve the opening resistance of a door, upon the activation of a switch or a continued force applied to the door itself.

▶ "Public use" means any interior and exterior rooms or spaces made available to the general public. Public use may be provided at a building or facility that is privately or publically owned. ◀

"Ramp" means a walking surface that has a running slope greater than 1:20.

▶ "Reconstruction" means the act or process of reproducing by new construction the exact form and detail of a vanished building, structure, or object, or a part thereof, as it appeared at a specific period of time. ◀

▶ "Restoration" means the act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later works or by replacement of missing earlier work. ◀

"Running slope" means the slope that is parallel to the direction of travel (see "cross slope").

"Section 502 of the Rehabilitation Act" or "Section 502" means Section 502

of the Rehabilitation Act of 1973, Pub. L. 93-112, 29 U.S.C. 792, as amended.

"Shall" denotes a mandatory requirement.

"Signage" means the display of written, symbolic, tactile, or pictorial information.

"Site" means a parcel of land bounded by a property line or a designated portion of a public right-of-way.

"Site improvements" means landscaping, paving for pedestrian and vehicular ways, outdoor lighting, recreational facilities, and similar site additions.

"Space" means a definable area, e.g., toilet room, hall, assembly area, parking area, entrance, storage room, alcove, courtyard, or lobby.

"Standard" means any standard for accessibility issued under the Architectural Barriers Act.

"Standard-setting agency" means one of the four agencies required to issue standards under the Architectural Barriers Act, i.e., the General Services Administration, the Department of Housing and Urban Development, the Department of Defense, and the United States Postal Service.

"Structural impracticability" means having little likelihood of being accomplished without removing or altering a load-bearing structural member ▶ and/or ◀ at an increased cost of 50 percent or more of the value of the element of the building or facility involved.

"Tactile" means perceptible through the sense of touch.

"Tactile warning" means a surface texture applied to or built into walking surfaces or other elements to warn visually impaired persons of hazards in the path of travel.

▶ "Temporary" means elements are not permanent (i.e., installed for less than six months) and are not required for safety reasons. ◀

"Walk" means an exterior pathway or space with a prepared surface intended for pedestrian use and having a slope of 1:20 or less. It includes general pedestrian areas such as plazas and courts.

§ 1190.4 Issuance of Architectural Barriers Act standards by standard-setting agencies.

(a) These guidelines and requirements are the minimum requirements for standards issued under the Architectural Barriers Act by the Administrator of General Services, Secretary of Housing and Urban Development, Secretary of Defense, and Postmaster General.

(b) Standards which conform to or exceed the provisions of the guidelines shall be deemed in compliance with the guidelines and requirements.

(c) Each standard-setting agency is encouraged to issue standards which follow the format of these guidelines and requirements. However, standards which differ in format from these guidelines and requirements but are otherwise consistent with the guidelines and requirements shall be deemed in compliance with these guidelines and requirements.

§ 1190.5 Guidelines: Other uses.

The guidelines and requirements may be used by other governmental and nongovernmental entities to make buildings and facilities accessible to, and usable by, physically handicapped persons.

§ 1190.6 Interpretation of guidelines.

(a) These guidelines and requirements shall be liberally construed to carry out the purposes and provisions of the Architectural Barriers Act and Section 502 of the Rehabilitation Act.

(b) Words importing the singular number may extend and be applied to the plural and vice versa. However, unless otherwise specified in the guidelines

and requirements, each element or space of a particular building or facility shall comply with the guidelines and requirements.

(c) Use of the imperative mood, e.g., "provide," means the provision is mandatory. This form is being used to avoid wordiness and monotony but means the same as if the word "shall" had been included.

(d) The provisions in the minimum guidelines and requirements are based upon adult dimensions and anthropometrics.

(e) Dimensions that are not marked "minimum" or "maximum" are absolute, unless otherwise indicated in the text or captions. All dimensions are subject to conventional building tolerances for field conditions.

§ 1190.7 Effect of State or local law.

The obligation to comply with this part is not affected by any State or local law.

§ 1190.8 Site conditions. [Reserved]

§ 1190.9 Severability.

If any section, subsection, paragraph, sentence, clause, or phrase of these guidelines and requirements is declared invalid for any reason, the remaining portions of these guidelines and requirements that are severable from the invalid part shall remain in full force and effect. If a part of these guidelines and requirements is invalid in one or more of its applications, the part shall remain in effect in all valid applications that are severable from the invalid applications.

Subpart B. [Reserved]

Subpart C--Scope

§ 1190.30 Scope. [Reserved]

▶ Except as otherwise provided in this Subpart, any covered building or facility which is designed, constructed or altered after the effective date of an applicable standard shall comply with the provisions of such standard issued in conformance with the provisions of this Subpart. Any other building or facility covered by the Architectural Barriers Act, if and when required by law, shall comply with such standard issued in conformance with the provisions of § 1190.31 Accessible Buildings and Facilities: New Construction. ◀

§ 1190.31 Accessible buildings and facilities: New construction.

Except as otherwise provided in Subpart E, all new construction of buildings and facilities shall comply with the following minimum requirements:

(a) Accessible route. At least one accessible route shall comply with § 1190.50, Walks, floors, and accessible routes, and shall connect an accessible building entrance with:

(1) Transportation facilities located within the property line of a given site, including passenger loading zones, public transportation facilities, taxi stands, and parking;

(2) Public streets and sidewalks;

(3) Other accessible buildings, facilities, elements, and spaces that are on the same site; and

(4) All accessible spaces, rooms, and elements within the building or facility.

(b) Parking and passenger loading zones. ▶ (1) ◀ If any parking is provided, for employees or visitors, or both, each such parking area shall comply with § 1190.60, Parking and passenger loading zones, and the following table:

Total Parking in Lot	Required Minimum Number of Accessible Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2% of Total
over 1000	20 plus 1 for each 100 over 1000

▶ (i) ◀ EXCEPTION: The total number of accessible parking spaces may be distributed among parking lots, if greater accessibility is achieved.

▶ (ii) ◀ EXCEPTION: This paragraph does not apply to parking provided for official government vehicles owned or leased by the government and used exclusively for government purposes.

Parking spaces for side lift vans, § 1190.60(c)(2)(a), are accessible parking spaces and may be used to meet the requirements of this paragraph.

▶ (2) ◀ If passenger loading zones are provided, at least one passenger loading zone shall comply with § 1190.60, Parking and passenger loading zones.

(c) Ramps and curb ramps. If there is an abrupt level or grade change, if the slope is greater than 1:20, and if no other means of accessible vertical access is provided, a ramp or curb ramp shall be provided. If a ramp or curb ramp is provided, it shall comply with § 1190.70, Ramps and curb ramps.

(d) Stairs. Except as provided in paragraph 1190.31(f)(1), stairs connecting levels that are not connected by an elevator shall comply with § 1190.80, Stairs.

(e) Handrails. Handrails shall be provided at each ramp and staircase as required in § 1190.70, Ramps and curb ramps, and § 1190.80, Stairs, respectively, and shall comply with

§ 1190.90, Handrails.

(f) Elevators. One passenger elevator complying with § 1190.100, Elevators shall serve each level in all multi-story buildings and facilities. If more than one elevator is provided, each elevator shall comply with § 1190.100, Elevators.

(1) Exception. Elevator pits, elevator penthouses, mechanical rooms, piping, or equipment catwalks are excepted from this requirement.

(2) Exception. Ramps or platform lifts complying with § 1190.70, Ramps and curb ramps, and § 1190.110, Platform lifts, respectively, may be used in lieu of an elevator.

(g) Platform lifts. If the slope is greater than 1:20, and if no other means of accessible vertical access is provided, a platform lift may be provided if there is an abrupt level or grade change. If a platform lift is provided, it shall comply with § 1190.110, Platform lifts.

(h) Entrances. [At least one entrance to a building or facility shall comply with § 1190.120 Entrances.]

▶ At least one principle entrance at each grade floor level to a building or facility shall comply with § 1190.120 Entrances. ◀ When a building or facility has entrances which normally serve any of the following functions: transportation facilities; passenger loading zones; parking facilities; taxi stands; public streets and sidewalks; accessible interior vertical access, then at least one of the entrances serving each such functions shall comply with § 1190.120, Entrances.

[When a building or facility has entrances on more than one exposure, then at least one entrance for each exposure shall comply with § 1190.120, Entrances, unless site conditions preclude accessibility.] ▶ Because entrances also serve as exits, particularly in cases of emergency, the proximity of such accessible entrances and exits to all parts of the building and facility is essential. It is preferable that all or most entrances and exits be accessible. ◀

(i) Doors.

(1) At each accessible entrance to a

building or facility, at least one door shall comply with § 1190.130, Doors.

(2) [For each space] Within a building or facility, at least one door at each accessible entrance to the accessible space shall comply with § 1190.130, Doors.

(3) Each door required by paragraph 1190.50(h), Egress, shall comply with § 1190.130, Doors.

(4) Each door that is an element of an accessible route shall comply with § 1190.130, Doors.

(j) Windows. [Reserved]

(k) Toilet and bathing facilities.

[Each toilet and bathing facility provided shall comply with § 1190.150, Toilet and bathing facilities, and in]

▶ If toilet facilities are provided, then each public and common use toilet room shall comply with § 1190.150, Toilet and bathing facilities. Other toilet rooms shall be adaptable. If bathing facilities are provided, then each public and common use bathroom shall comply with § 1190.150. ▶ In ◀ each such facility where any of the fixtures and accessories specified in

1190.150(e) and (f) are provided, at least one accessible fixture and accessory of each type provided shall comply with paragraph 1190.150(e) and (f). ▶ At least one standard size toilet stall (or the equivalent size toilet room containing one water closet and one lavatory) complying with § 1190.150(e)(2)(ii) and Figure 15.7 shall be provided in each building or facility. Signage complying with § 1190.200 shall be located at the entrance of each toilet room not containing a standard size toilet stall and it shall direct the user to the location of the toilet room containing the standard size toilet stall. ◀ For special use situations, refer to Subpart E, Special Building or Facility Types or Elements.

(1) Drinking fountains and water coolers. If drinking fountains or water coolers are provided, approximately 50% of those provided on each floor shall comply with § 1190.160, Drinking fountains and water coolers, and shall be dispersed throughout the floor. If only one

drinking fountain or water cooler is provided on any floor, it [shall have two levels and the lower level] shall comply with § 1190.160. ▶ It is preferred that if only one drinking fountain or water cooler is provided on any floor, then it should have two levels with the lower level complying with § 1190.160. ◀

(m) Controls and operating mechanisms. If controls and operating mechanisms are provided, each shall comply with § 1190.170, Controls and operating mechanisms.

(n) Alarms. If alarm systems are provided, each shall comply with § 1190.180, Alarms.

(o) Tactile warnings. Tactile warnings complying with paragraph 1190.130(g), Doors to hazardous areas, shall be provided on the hardware of all doors that lead to hazardous areas. Tactile warnings shall not be used at emergency exit doors.

(p) Signage.

(1) The international symbol of accessibility shall comply with paragraph 1190.200(e), Symbol of accessibility, and shall be used at the following locations:

(i) Parking spaces designated as reserved for the physically handicapped;

(ii) Passenger loading zones;

(iii) Accessible entrances;

(iv) Accessible toilet and bathing facilities.

(2) Informational signing, if provided, shall comply with § 1190.200.

▶ (i) Exception. The provisions of paragraph 1190.200(c) are not mandatory for temporary information on room and space signage.

(ii) Reserved. ◀

(q) Telephones. ▶ See ATBCB Minimum Guidelines and Requirements for Accessible Design, Amendments to Final Rule, published elsewhere in this Federal Register. ◀

(r) Seating, tables, and work surfaces. If fixed seating, tables, and work surfaces are provided, at least 5 percent ▶ but always at least one ◀ of each element shall comply with § 1190.220, Seating, tables, and work surfaces.

*(s) Assembly areas ▶, conference and meeting rooms.

▶ (1) ◀ If assembly areas are provided, accessible viewing positions shall comply with § 1190.230, Assembly areas, and the following table:

Capacity of Assembly Space	Number of Viewing Positions
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2% of total
over 1000	20 plus 1 for each 100 over 1000

▶ (2) For each assembly area, provide a permanent listening system to assist no fewer than two persons with severe hearing loss. For spaces used primarily as conference and meeting rooms, provide a listening system that may be either permanently installed or portable. A portable system may be used to serve more than one meeting or conference room.

or

(2) Assembly areas with audio-amplification systems shall have a listening system complying with § 1190.230 to assist a reasonable number of people, but no fewer than two, with severe hearing loss in the appreciation of audio presentations. ◀

(t) Storage. If storage facilities such as cabinets, shelves, closets and drawers are provided in accessible spaces for occupant use, at least one storage facility of each type provided shall comply with § 1190.240, Storage. ▶ Additional storage may be provided

*The ATBCB requests comment on the two alternatives proposed for scoping requirements for listening systems. Which alternative, if either, is preferable?

outside of the dimensions provided in § 1190.240. 4

§ 1190.32 Accessible buildings and facilities: Additions.

Each addition to an existing building or facility shall comply with § 1190.31, New construction, except as follows:

(a) Entrances. If a new addition to a building or facility does not have an entrance, then at least one entrance in the existing building or facility shall comply with § 1190.120, Entrances.

(b) Accessible route. If the only accessible entrance to the addition is located in the existing building or facility, then at least one accessible route shall comply with § 1190.50, Walks, floors, and accessible routes, and shall provide access through the existing building or facility to all rooms, elements, and spaces in the new addition.

(c) Toilet and bathing facilities. If there are no toilet rooms and bathing facilities in the addition and these facilities are provided in the existing building, then at least one toilet and bathing facility in the existing building shall comply with § 1190.150, Toilet and bathing facilities.

(d) Elements, spaces, and common areas. If elements, spaces, or common areas are located in the existing building and they are not provided in the addition, consideration should be given to making those elements, spaces, and common areas accessible in the existing building.

► (e) EXCEPTION: Mechanical rooms, storage areas, and other such minor additions which normally are not frequented by the public or employees of the facility, are excepted from paragraphs a, b, and c of § 1190.32. 4

§ 1190.33 Accessible buildings and facilities: Alterations.

(a) General. Alterations to existing buildings or facilities shall comply with the following:

(1) If existing elements, spaces,

essential features, or common areas are altered, then each such altered element, space, feature, or area shall comply with the applicable provisions of § 1190.31, Accessible buildings and facilities: New construction.

(2) If power-driven vertical access equipment (e.g., escalator) is planned or installed where none existed previously, or if new stairs (other than stairs installed to meet emergency exit requirements) requiring major structural changes are planned or installed where none existed previously, then a means of accessible vertical access shall be provided that complies with § 1190.70, Ramps and curb ramps; § 1190.100, Elevators; or § 1190.110, Platform lifts, except to the extent where it is structurally impracticable in transit facilities. 4

(3) If alterations of single elements, when considered together, amount to an alteration of a space of a building or facility, the entire space shall be made accessible.

(4) Signage. If an existing building or facility contains some but not all accessible elements and spaces, informational signage complying with § 1190.200, Signage, directing the user to accessible facilities shall be placed at each accessible entrance. Each inaccessible entrance and each inaccessible toilet room shall have signage directing the user to the accessible entrance(s) or toilet room(s).

(b) [Alterations involving more than 50% of the full and fair cash value. If the total cost of all alterations (including but not limited to electrical, mechanical, plumbing and structural changes) for a building or facility within any twelve (12) month period is 50% or more of the building's full and fair cash value (as defined by 1190.3), then each element or space that is altered or added shall comply with the applicable provisions of § 1190.31, Accessible buildings and facilities: New construction; and the altered building shall contain:] ►
Where a building or facility is vacated

and it is totally altered then it shall comply with § 1190.31 Accessible buildings and facilities: New construction, except to the extent where it is structurally impracticable. ◀

▶ (c) Where substantial alteration occurs to a building or facility, then each element or space that is altered or added shall comply with the applicable provisions of § 1190.31 Accessible buildings and facilities: New construction and the altered building or facility shall contain: ◀

(1) At least one accessible route complying with § 1190.50, Walks, floors, and accessible routes, and paragraph 1190.33(a);

(2) At least one accessible entrance complying with § 1190.120, Entrances. If additional accessible entrances are altered, then they shall comply with paragraph 1190.33(a)(1); and

(3) The following toilet facilities, whichever number is greater:

(i) At least one toilet facility for each sex in the altered building complying with § 1190.150, Toilet and bathing facilities;

(ii) At least one toilet facility for each sex on each substantially altered floor, where such facilities are provided, complying with § 1190.150, Toilet and bathing facilities.

▶ In making the determination as to what constitutes "substantial alteration," the agency issuing standards for the facility shall consider the total cost of all alterations (including but not limited to electrical, mechanical, plumbing, and structural changes) for a building or facility within any twelve (12) month period. For guidance in implementing this provision, an alteration to any building or facility is to be considered substantial if the total cost for this twelve month period amounts to 50% or more of the full and fair cash value of the building as defined at 1190.3. ◀

(4) Exception. If the cost of the elements and spaces required by paragraphs 1190.33(b)(1), (2), and (3) exceeds 15% of the total cost of all other alterations, then a schedule may

be established by the standard-setting and/or funding agency to provide the required improvements within a 5 year period.

(5) Exception. If the alteration is limited solely to the electrical, mechanical, or plumbing system and does not involve the alteration of any elements and spaces required to be accessible under Part 1190 the 1190.33(b) does not apply.

(6) Exception. Consideration shall be given to providing accessible elements and spaces in each altered building or facility complying with:

(i) § 1190.60, Parking and Passenger Loading Zones;

(ii) § 1190.160, Drinking Fountains and Water Coolers;

(iii) § 1190.180, Alarms;

(iv) § 1190.210, Telephones;

(v) § 1190.220, Seating Tables and Work Surfaces;

(vi) § 1190.230, Assembly Areas;

(vii) § 1190.240, Storage.

§ 1190.34 [Accessible buildings and facilities: Leased.] ▶ (RESERVED). ◀

[(a) Buildings or facilities or portions thereof leased by the Federal government shall comply with the requirements of § 1190.31, New construction, § 1190.32, Additions, and § 1190.33, Alterations.

(b) If no fully accessible space is available, space may be leased only if the following conditions are met:

(1) At least one accessible route is provided from an accessible entrance complying with § 1190.120, Entrances, to all leased portions of the building or facility and to each essential feature which serves that portion of the building or facility. The accessible route shall comply with the requirements of § 1190.50 Walks, floors, and accessible routes.

(2) Each essential feature of the portion of the building or facility to be leased is accessible and complies with the applicable sections.

(3) Common areas that are approved space needs of the occupant agency serving the portions of the building or facility to be leased are accessible

and comply with the applicable section.

(c) Exception. If no space complying with (a) or (b) is available, space as available may be leased, provided--

(1) The leasing authority certifies that space is unavailable due to remoteness of the area or that the lease is necessary for officials servicing natural or human-made disasters; and

(2) The ATBCB is provided a listing of instances in which this exception is applied as part of the semi-annual report to Congress.

(d) Any other deviation from the requirements of § 1190.34 shall be made only through the waiver or modification process.]

► Note: The Minimum Guidelines and Requirements for Accessible Design require that all buildings and

facilities covered by the Architectural Barriers Act are subject to this Part.

As published on January 16, 1981, the Guidelines and Requirements specifically provided that all buildings and facilities leased by the Federal government must be accessible at the time the building or facility is leased. In view of the continuing controversy over the point at which the Architectural Barriers Act applies to leased buildings and facilities, this Part no longer specifies at which point the accessibility standard must apply to leased buildings and facilities. This change has been made solely in recognition of the fact that the issue concerning the applicability of the Architectural Barriers Act to leased buildings is a legal one on which the Board expresses no position. ◀

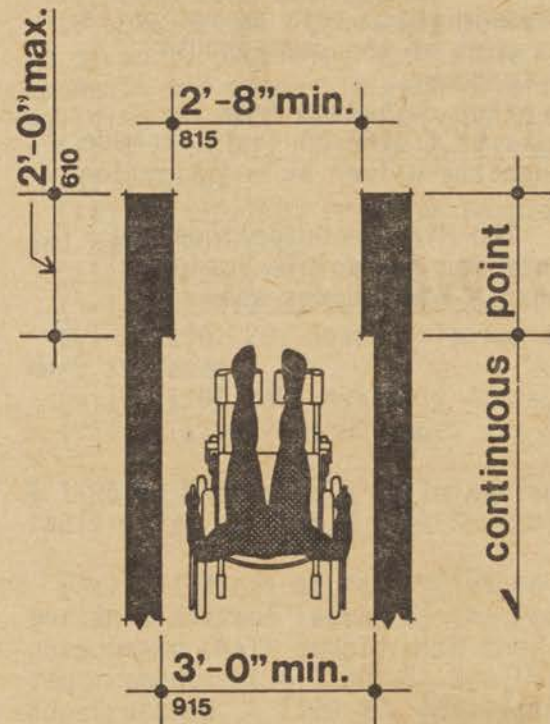
SUBPART D—TECHNICAL

Subpart D—Technical Provisions

§1190.40 Human data.

- (a) **General.** This section is the basis for clearances and equipment location required by other sections.
- (b) **Moving wheelchair clearances.** Provide the clearances for moving wheelchairs as follows:
- (1) Min. clear width for passage of a single wheelchair is 3'-0" (915 mm) (fig. 4.1).
 - (i) **Exception.** The clear width may be reduced to 2'-8" (815 mm) for a distance not to exceed 2'-0" (610 mm) in length at points such as doorways (fig. 4.1).
 - (ii) (Reserved)

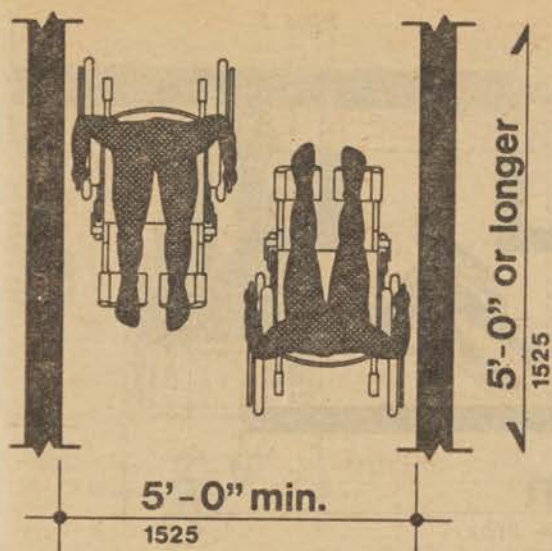
ANSI
4.2.1



passage

ANSI Figures 1 and 24(e)





two-way

ANSI Figure 2

4.
2

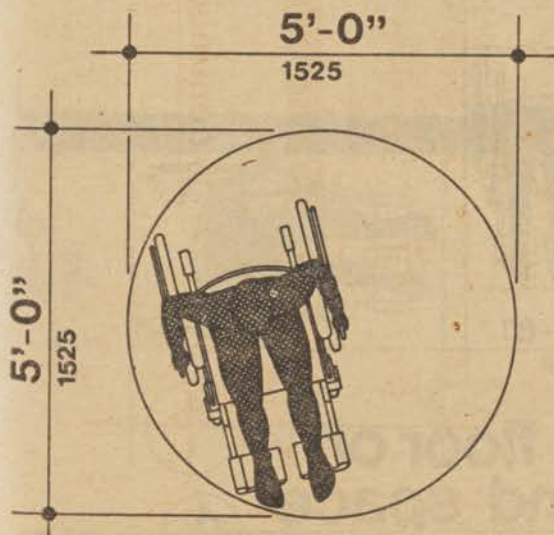
ANSI

4.2.2

(2) Min. clear width for two wheelchairs to pass is 5'-0" (1,525 mm) (fig. 4.2).

4.2.3

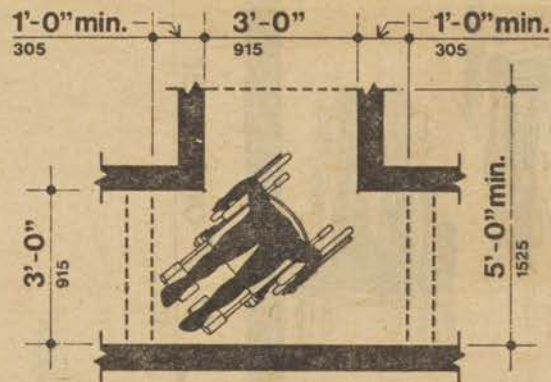
(3) Min. clear space to make a 180 degree turn is a 5'-0" (1,525 mm) diameter (fig. 4.3) or a T-shaped space that complies with fig. 4.4.



180°/360°

ANSI Figure 3(a)

4.
3



t-turn

ANSI Figure 3(b)

Note: ANSI does not specify or illustrate the length of the arms for the T-turn.

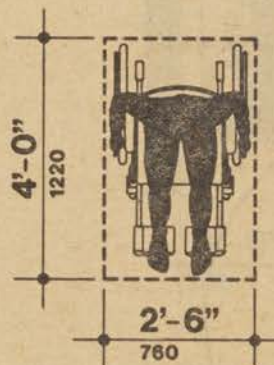
4.
4

ANSI

- 4.2.4 (c) **Clear floor or ground space.** Provide the following clear floor or ground space to accommodate a single, stationary occupied wheelchair:

- (1) Clear floor or ground space shall be a min. of 2'-6" by 4'-0" (760 mm by 1,220 mm) (fig. 4.5).

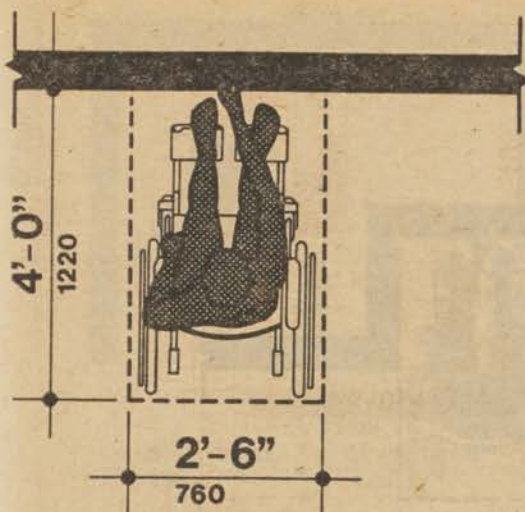
4.2.4.1



clear floor or ground space

ANSI Figure 4(a)

4.
5



forward approach

ANSI Figure 4(b)

4.
6

ANSI

4.2.4.1

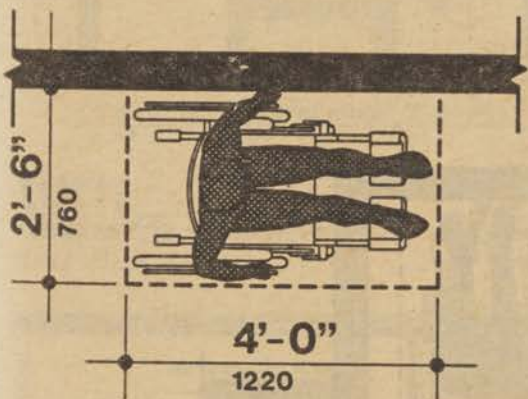
- (2) Position clear floor or ground space for either forward or parallel approach to an object or element as required (figs. 4.6 and 4.7).

4.2.4.1

- (3) Clear floor or ground space may overlap the clear space required under some objects.

4.2.4.2

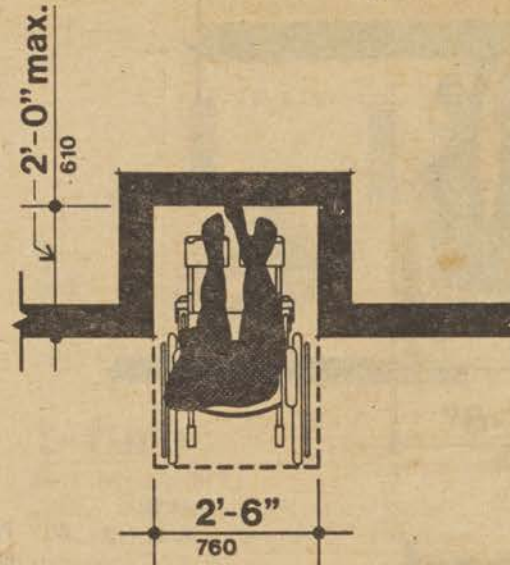
- (4) Clear floor or ground space shall adjoin or overlap an accessible route or another clear floor or ground space for at least one full, unobstructed side.



parallel approach

ANSI Figure 4(c)

4.
7



alcove

ANSI Figure 4(d)

4.
8

ANSI

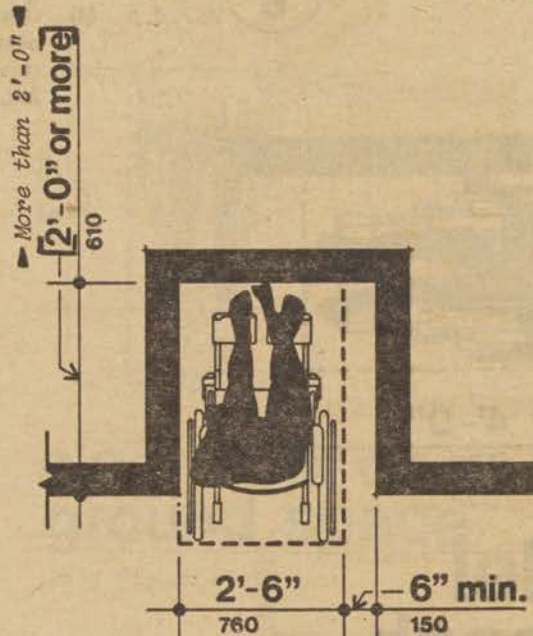
4.2.4.2 (5) See ATBCB Minimum Guidelines and Requirements for Accessible Design, Amendment to Final Rule, published elsewhere in this Federal Register.

4.2.4.3 (6) Surfaces of clear floor or ground spaces shall comply with paragraph 1190.50(i), Walks, floors, and accessible routes.

(d) Reach limitations. See ATBCB Minimum Guidelines and Requirements for Accessible Design, Amendment to Final Rule, published elsewhere in this Federal Register.

* * * * *

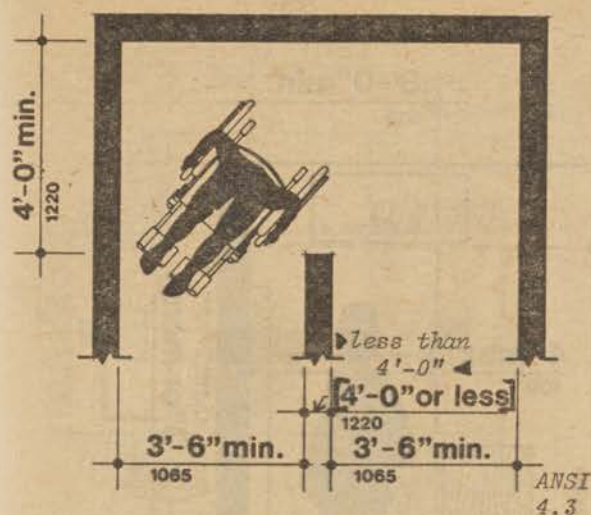
4.27.3 (3) To be accessible, special equipment may require measurements different from those provided above and these measurements should be dictated by equipment design.



alcove

ANSI Figure 4(e)

4.
9



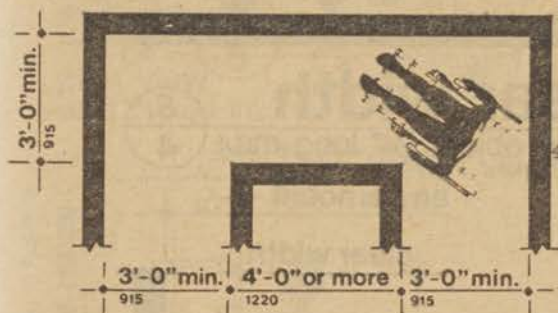
§1190.50 Walks, floors, and accessible routes.

turn

maneuvering clearances

ANSI Figure 7(b)

5.
1



(a) **General.** Accessible routes required by Subpart C—Scope shall comply with this section.

4.3.3 (b) **Width.** Provide the min. clear width for continuous passage and for point passage required by paragraph 1190.40(b)(1) (fig. 4.1). Provide maneuvering clearances as shown in figs. 5.1 and 5.2 if the accessible route requires a turn around an obstruction.

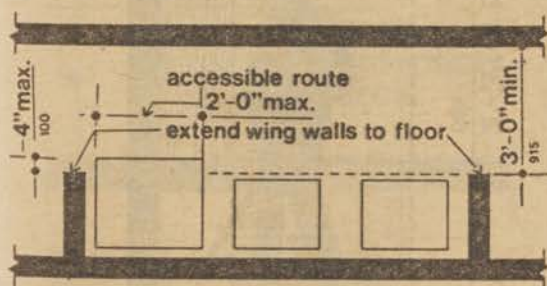
(c) **Protruding objects.** No protruding object shall reduce the clear width of an accessible route or maneuvering space below the min. required by paragraph 1190.40(b)(1) (fig. 5.3).

turn

maneuvering clearances

ANSI Figure 7(a)

5.
2



clear width

ANSI Figure 8(e)

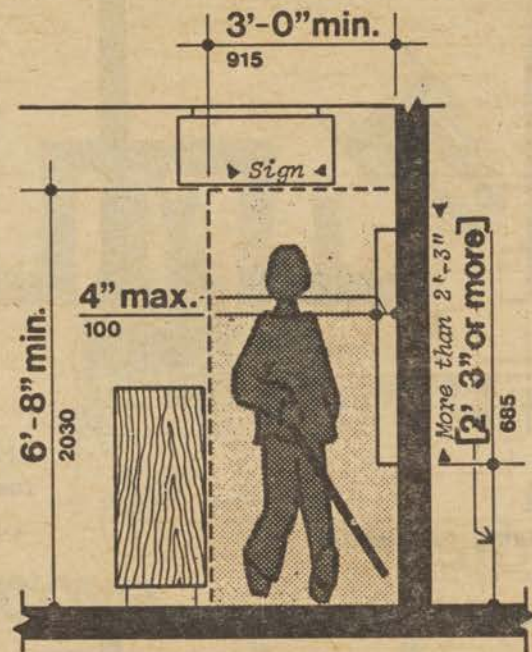
5.
3

ANSI

- 4.4.1 (1) Objects less than 2'-0" (610 mm) long that are fixed to wall surfaces shall not project into accessible routes more than 4 in. (100 mm) if mounted with their leading edges between 2'-3" and 6'-8" (685 mm and 2,030 mm) (nominal dimension) above finish floor (fig. 5.4).

- 4.4.1 (2) Objects fixed to wall surfaces may project more than 4 in. (100 mm) if mounted with the lower extreme of their leading edge less than 2'-3" (685 mm) above the finish floor. These objects shall not project into the required min. clear width (fig. 5.5).

► at or below ◀



clear width

around object 24" long max.

ANSI Figure 8(a)

any amount -

clear width

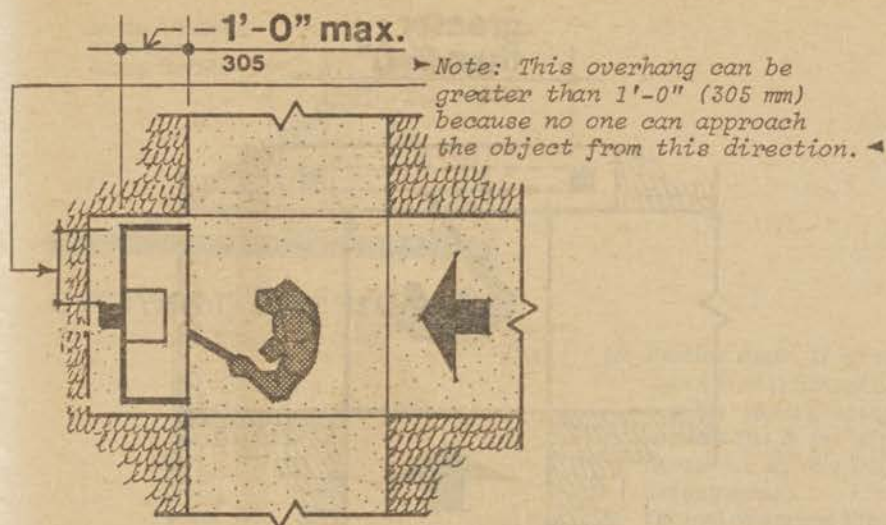
2'-3" or below
685

clear width

ANSI Figure 8(a)

5.
4

5.
5



Note: This overhang can be greater than 1'-0" (305 mm) because no one can approach the object from this direction. ◀

projecting object

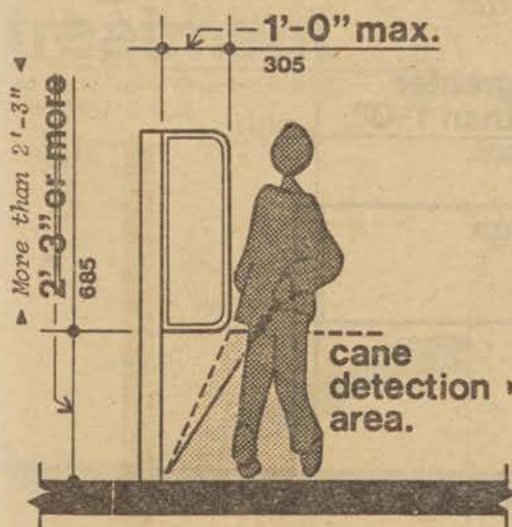
plan view

ANSI Figure 8(d)

5.
6

ANSI
4.4.1

- (3) Free standing objects mounted on posts or pylons may overhang 1'-0" (305 mm) max. from 2'-3" to 6'-8" (685 mm to 2,030 mm) above ground or finished floor surface (figs. 5.6 and 5.7).



cane detection area.

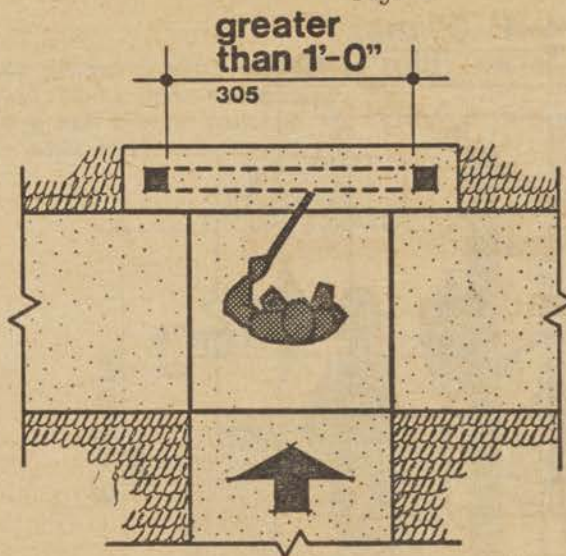
Note: Cane hits post or pylon before person hits object. ◀

projecting object

elevation

ANSI Figure 8(d)

5.
7



fixed obstruction

plan view

ANSI Figure 8(a)

5.
8

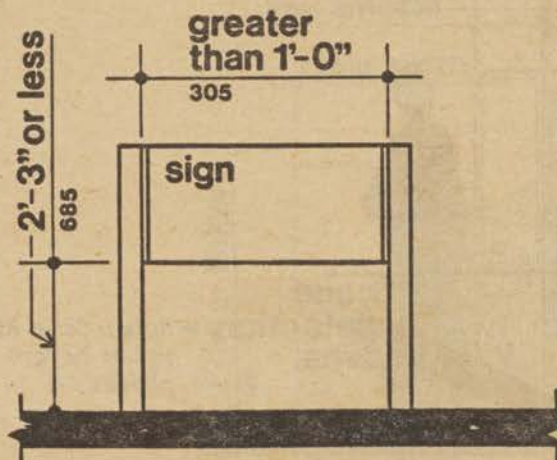
- (4) [Objects greater than 1'-0" (305 mm) wide mounted with their leading edge less than

2'-3" (685 mm) may protrude any distance (figs. 5.8 and 5.9).] ▶ Objects mounted

with their leading edges at or below 2'-3" (685 mm) above the finished floor may protrude any amount (figs. 5.8 and 5.9). ◀

ANSI

4.4.1

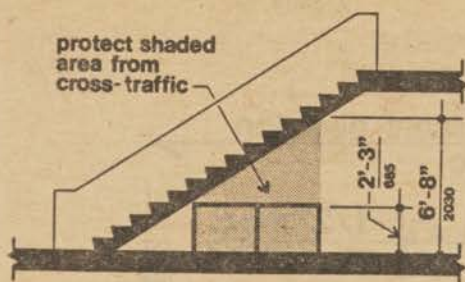


fixed obstruction

elevation

ANSI Figure 8(c)

5.
9



overhead hazard

no similar figure in ANSI

5.
10

ANSI
4.3.4

- (d) **Passing space.** If an accessible route has less than a 5'-0" (1,525 mm) clear width, provide accessible passing spaces at intervals not exceeding 200 ft. (61 m) [unobstructed view]. See figures 4.2 and 4.4 for examples of acceptable passing spaces.

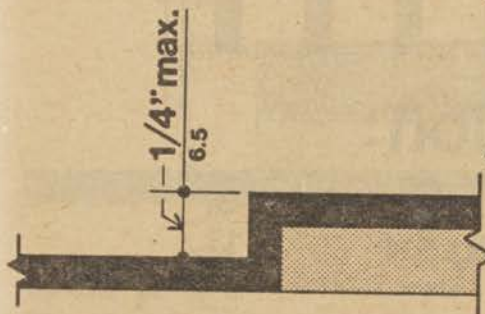
- (e) **Vertical clearance.** Provide a minimum vertical clearance (headroom) of 6'-8" (2,030 mm) throughout accessible routes. If vertical clearance of area adjoining accessible route is reduced to less than 6'-8", (nominal dimension) provide a barrier to warn blind or visually-impaired persons (figs. 5.4, 5.9 and 5.10).

- (f) **Slope.** Accessible routes with running slopes of [1:20 or greater] shall be considered ramps and shall comply with 1190.70, Ramps and curb ramps. Cross-slopes on accessible routes shall not exceed 1:48 (1/4 in. per foot).

- (g) **Changes in level.** All changes in level or grade in accessible routes shall comply with the following:

- (1) Up to 1/4 in. (6 mm): vertical without edge treatment (fig. 5.11).
- (2) 1/4 in. to 1/2 in. (6 mm to 13 mm): beveled with slope not exceeding 1:2 (fig. 5.12).

Note: ANSI cross-slope requirement is 1:50 which is slightly more restrictive than the Board's.



edge treatment

no similar figure in ANSI
see ANSI 4.5.2

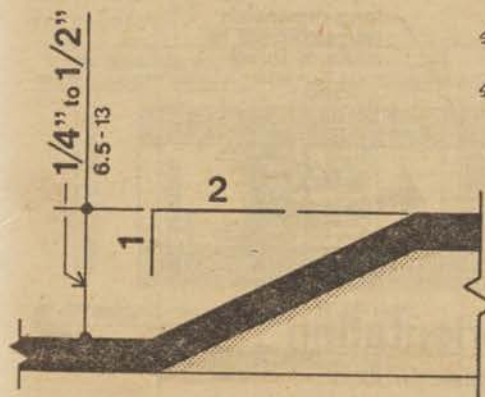
4.3.7
greater than 1:20

5.
11

4.3.8

4.5.2

4.5.2



edge treatment

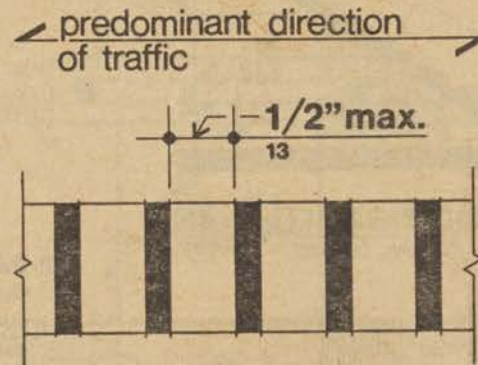
no similar figure in ANSI
see ANSI 4.5.2

5.
12

ANSI

- 4.3.8 & 4.5.2 (3) Greater than 1/2 in. (13 mm); comply with § 1190.70, Ramps and curb ramps; § 1190.100, Elevators; or § 1190.110, Platform Lifts.
- 4.13.8 (i) Exception. Exterior sliding door thresholds may be 3/4 in. (19 mm) max. if beveled with slope not exceeding 1:2.
- (ii) [Reserved]
- 4.3.8 (4) Stairs shall not be the sole means of vertical access along an accessible route.
- 4.3.10 (h) Egress. Arrange egress so as to be readily accessible from all accessible rooms and spaces. Where fire code provisions require more than one means of egress from any space or room, such means of accessible egress shall also be provided to handicapped persons.
- (1) Exception. In multiple story buildings and facilities where at-grade egress from each floor is impossible, either of the following is permitted:
- (i) The provision of approved fire and smoke partitions within each story creating horizontal exits; or
- (ii) The provision of areas of refuge within each floor approved by agencies having authority for safety.
- (2) [Reserved].
- 4.5.1 (i) **Ground and floor surfaces.**
- (1) Surface Condition. Surfaces of paving and floors shall be stable, firm, and slip-resistant. Irregular paving and flooring materials that may cause tripping or difficult wheelchair passage because of height differentials are not permitted on accessible routes.
- 4.5.4 & 4.8.8 (2) Drainage. Design accessible routes so that their surfaces will not collect water. Gratings located in accessible routes shall have openings no greater than 1/2 in. (13 mm) when measured in the dominant direction of travel (fig. 5.13). Gratings with elongated openings shall be so placed that the long dimension is perpendicular to the predominant route of travel (fig. 5.14).

Note: ANSI requires at 4.5.1 that surfaces be relatively nonslip under all weather conditions.

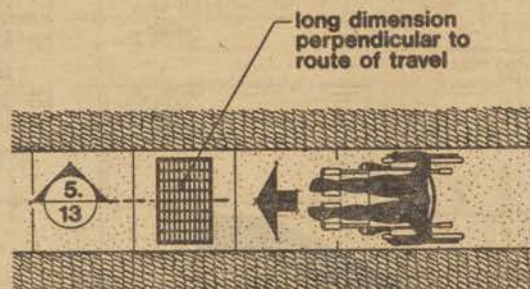


section: grating

detail of fig. 5.14

no similar figure in ANSI

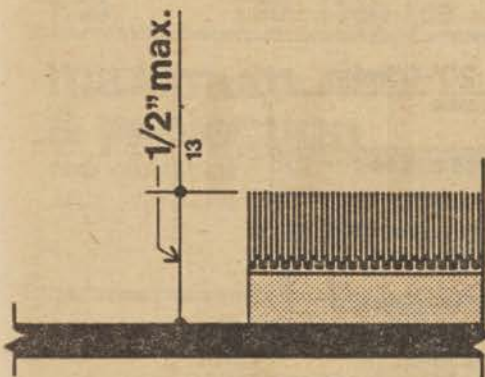
5.
13



grating orientation

no similar figure in ANSI

5.
14

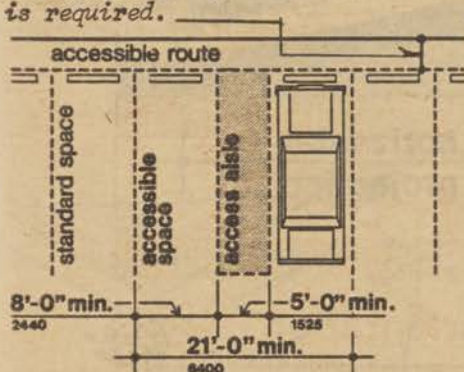
ANSI
4.5.3

carpet height

No similar figure in ANSI.

5.
15 ANSI
4.6

3'-0" min. (915 mm) if curb ramp is not required; 4'-0" min. (1220 mm) if curb ramp is required.



accessible parking

ANSI Figure 9

6.
1

- (3) Carpeting: If carpet or carpet tile is used on an accessible ground or floor surface, it shall:
- Be securely attached;
 - Have a firm cushion or pad or no cushion or pad;
 - Have a construction of level loop, textured loop, level cut pile, or level cut/uncut pile;
 - Have a max. combined thickness of pile, cushion, and backing height of 1/2 in. (13 mm) (fig. 5.15); and If carpet tile is used on an accessible ground or floor surface, it shall have a maximum combined thickness of pile, cushion and backing height of 1/2 inch (13 mm) (fig. 5.15). If carpet is used, then it should also meet this requirement but in no case shall the pile height exceed 1/2 inch.
 - Exposed edge(s) and trim shall be securely fastened in place and shall comply with paragraph 1190.50(g), Changes in level.

§1190.60 Parking and passenger loading zones.

- (a) **General.** Parking and passenger loading zones required to be accessible by Subpart C—Scope shall comply with this section.
- (b) **Location.** Accessible parking spaces and accessible passenger loading zones shall:
- Be the spaces or zones located closest to the nearest accessible entrance on an accessible route; and
 - If located in a separate building or facility, be on the shortest accessible route to an accessible entrance of the parking facility.
- (c) **Accessible parking spaces.** Provide accessible parking spaces (fig. 6.1) that:
- Are at least 8'-0" (2,440 mm) wide;
 - Have an adjacent access aisle at least 5'-0" (1,525 mm) wide and shall comply with § 1190.50, Walks, floors, and accessible routes;
- (i) **Exception.** If accessible parking spaces for [side lift] vans designed for handicapped persons are provided, [each shall have] an adjacent access aisle at least 8'-0" (2,440 mm) wide complying [and shall comply] with 1190.50 Walks, floors, and accessible routes shall be provided.
- (ii) [Reserved].

- 4.6.3 (3) May share a common access aisle between two parking spaces;
- (4) Do not permit parked vehicle overhangs to reduce the clear width of accessible routes; and
- (5) Have parking spaces and access aisles with surface slopes not exceeding 1:48 (1/4 in. per foot) in all directions.

ANSI

- 4.6.5 (d) **Passenger loading zones.** Provide accessible passenger loading zones that:
- (1) Have an access aisle at least 4'-0" (1,220 mm) wide by 20'-0" (6 m) long adjacent, parallel, and level with the vehicle standing space;
 - (2) Have curb ramps conforming to 1190.70, Ramps and curb ramps, if there are curbs between the access aisle and other portions of the accessible route; and
 - (3) Have vehicle standing spaces and access aisles with surface slopes not exceeding 1:48 (1/4 in. per foot) in all directions (fig. 6.2).

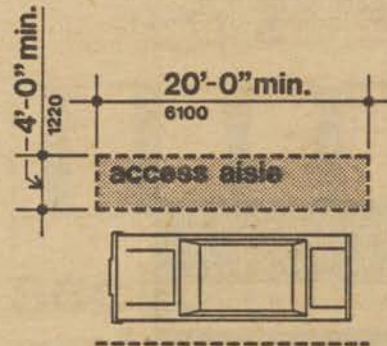
no similar ANSI provision (e) **Vertical clearance.** Provide min. vertical clearances of 9'-8" (3.45 m) at accessible parking spaces, *for vans designed for physically handicapped persons* at accessible passenger loading zones, and along vehicle access routes to such areas from site entrances.

- 4.6.4 (f) **Signage.** Signage reserving accessible parking spaces and identifying passenger loading zones and vehicle access routes shall comply with 1190.200, Signage. Signage shall incorporate the International Symbol of Accessibility and shall not be obscured by a vehicle parked in the space (fig. 20.2 and 20.3).

4.7 §1190.70 Ramps and curb ramps.

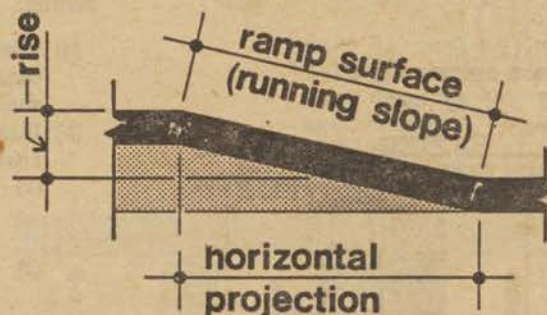
- (a) **General.** Ramps and curb ramps required by Subpart C—Scope shall comply with this section.
- 4.8.2 & 4.7.2 (b) **Slopes and rise.** Provide the least practical slope for any ramp or curb ramp subject to the following maximums:
 - (1) New Construction requirements:
 - (i) Max. running slope shall not exceed 1:12 (8.3%) (fig. 7.1).

* The Board request comments on the minimum vertical clearance needed to accommodate vans designed for physically handicapped persons. Is 9'-6" appropriate?



unloading zone 6.2

ANSI Figure 10



ramp slope

ANSI Figure 11 and 16

7.1

slope	maximum rise		maximum projection	
	in	mm	ft	m
1:12 to < 1:16	30	760	30	9
1:16 to < 1:20	30	760	40	12
1:20	30	760	50	15

maximum rise & projection

new construction

ANSI Figure 16

7.
2

slope	maximum rise		maximum projection	
	in	mm	ft	m
1:10 to 1:8	3	75	2	0.6
1:12 to 1:10	6	150	5	1.5

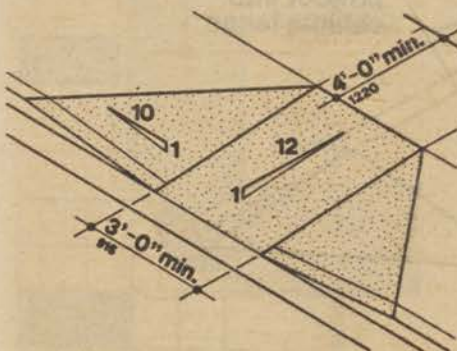
A slope steeper than 1:8 is not allowed

maximum rise & projection

existing construction

ANSI Table 2

7.
3



curb ramp

ANSI Figure 12(a)

Note: ANSI does not require 4'-0" (1220 mm) at top of curb ramps.

7.
4

ANSI
4.8.2

no similar
provision

- (ii) Max. rise for any run shall not exceed 2'-6" (760 mm) (fig. 7.2).
- (iii) Max. slopes of adjoining gutters, road surface, immediately adjacent to the curb ramp or accessible routes shall not exceed 1:20 and shall comply with paragraph § 1190.70(e)(8) (fig. 7.12).

4.8.2 (2) Existing construction requirements:

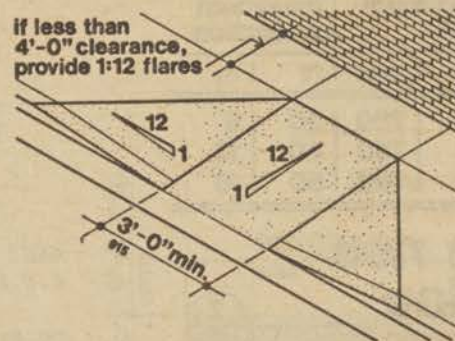
- (i) If space limitations prevent compliance with paragraph 1190.70(b)(1), slopes and rises listed in fig. 7.3 may be used.
- (ii) [Reserved].

4.7.3
4.8.3

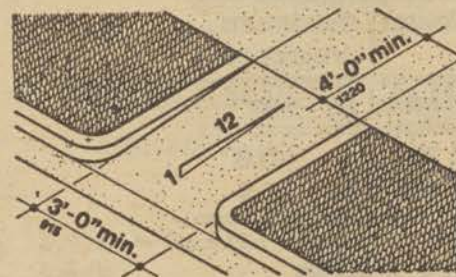
4.8.6
(ramps only)

4.7.5

- (c) Width. Ramps and curb ramps shall have a min. clear width of 3'-0" (915 mm) exclusive of edge protection or flared sides.
- (d) Cross-slope and surface. Cross-slope of ramp surfaces shall not exceed 1:48 (1/4 in. per foot). Ramp surfaces shall comply with 1190.50, Walks, floors, and accessible routes.
- (e) Curb ramps. In addition to the requirements of paragraphs 1190.70 (a), (b), and (c), curb ramps shall comply with the following requirements:
- (1) [Provide flared sides if ramps are located where pedestrians may walk across the ramp;] Provide flared sides if a circulation path crosses any part of the ramp or curb ramp not protected by handrails or guardrails; flared slope shall not exceed 1:10 (fig. 7.4) where a 4'-0" (1,220 mm) landing is provided at the top of the curb ramp.

**curb ramp**

no similar figure in ANSI

7.
5ANSI
4.7.5

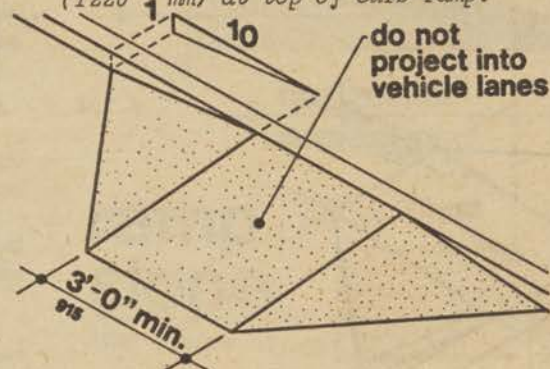
If less than 4'-0" (1,220 mm) is provided, the flared slope shall not exceed 1:12 (fig. 7.5). Where pedestrians will not normally walk across a ramp, returned curbs may be used (fig. 7.6).

- 4.7.6 (2) Locate built-up curb ramps so that they do not project in vehicular traffic lanes (fig. 7.7).

curb ramp

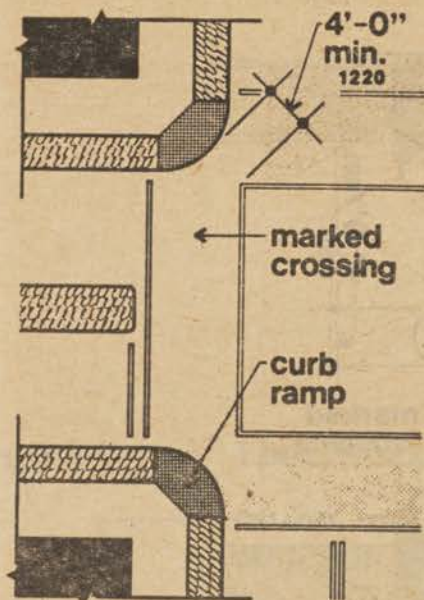
ANSI Figure 12(b)

Note: ANSI does not require 4'-0" (1220 mm) at top of curb ramp.

7.
6**curb ramp**

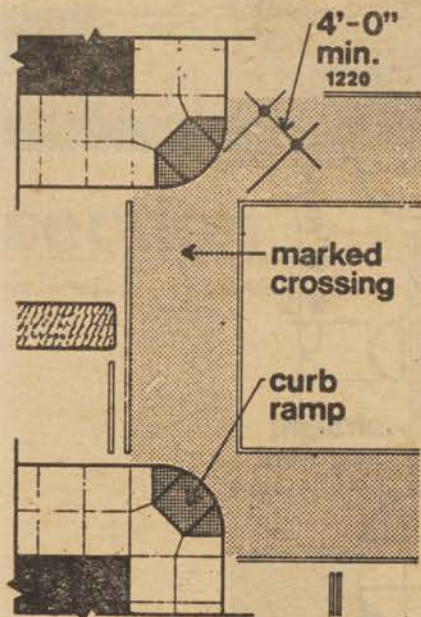
ANSI Figure 13

7.
7



crossing

ANSI Figure 15(d)

7.
8

crossing

ANSI Figure 15(c)

7.
9

ANSI

4.7.10

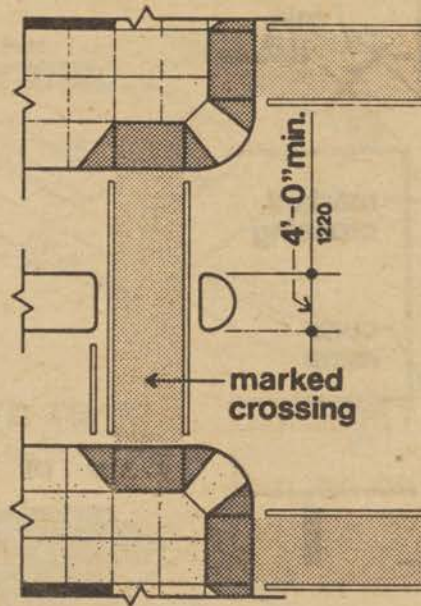
- (3) Diagonal or corner type curb ramps having returned curbs or well defined edges, shall have such edges parallel to the direction of pedestrian flow (fig. 7.8). Diagonal or corner type curb ramps having flared sides shall have at least a 2'-0" (610 mm) long segment of straight curb located on each side of the curb ramp and within marked crossings (fig. 7.9).

4.7.10

4.7.9

4.7.8

- (4) Curb ramp discharge (top and bottom) shall be to a 4'-0" (1,220 mm) min. deep clear space (figs. 7.4 and 7.5). If the marked crossings are provided, locate bottom discharge entirely within marked crossings (figs. 7.8 and 7.9).
- (5) Locate curb ramps to prevent blockage of discharge areas by parked vehicles.

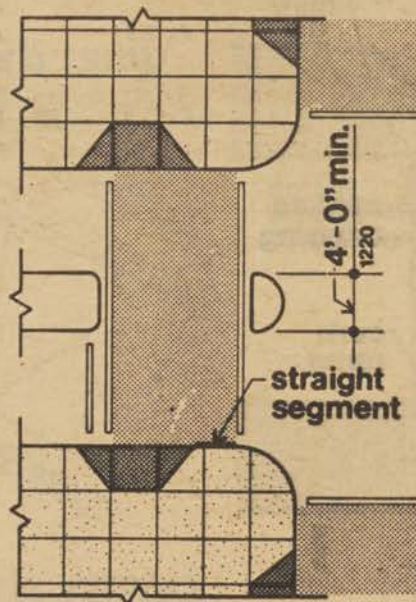


crossing

ANSI Figure 15(a)

7.

10



crossing

ANSI Figure 15(b)

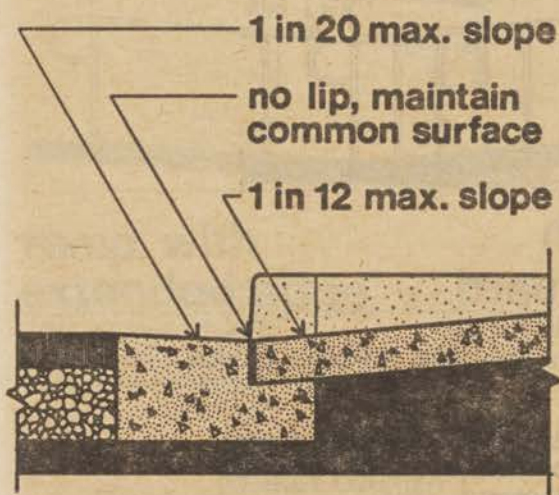
7.

11

ANSI

4.7.11

- (6) Cut any islands through flush with street surfaces or ramp each side to permit crossing. Provide 4'-0" (1,220 mm) long rest area (see figs. 7.10 and 7.11)



section

no similar figure in ANSI



- (7) [Curb ramps having less than a 6 in. (150 mm) rise do not require handrails.] Curb ramps which cross a circulation path but do not have an abrupt change in level, do not require handrails.
- (8) Transitions from ramps to walks, gutters, or streets shall be flush and free of abrupt changes (fig. 7.12).

Note: ANSI 4.7.7 Warning Textures and ANSI Figure 14 Warning Signals at Curb Ramps have been deleted from the ATBCB Minimum Guidelines and Requirements until such time as sufficient research and/or field experience dictate a requirement in this area.

Note: ANSI 4.7.12 Uncurbed Intersections has been deleted from the ATBCB Minimum Guidelines and Requirements until such time as research and/or field experience dictate such a requirement.

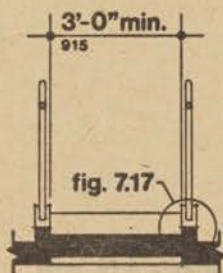
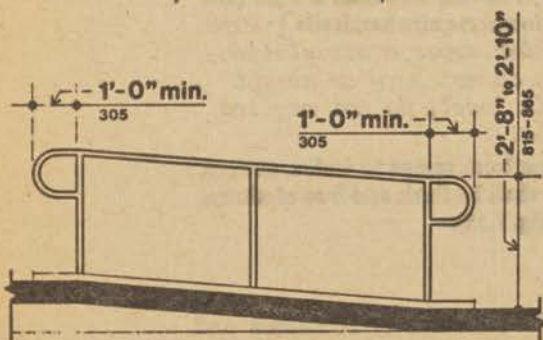
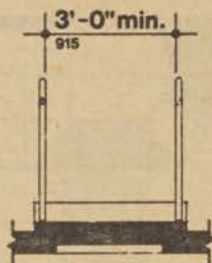


fig. 7.17

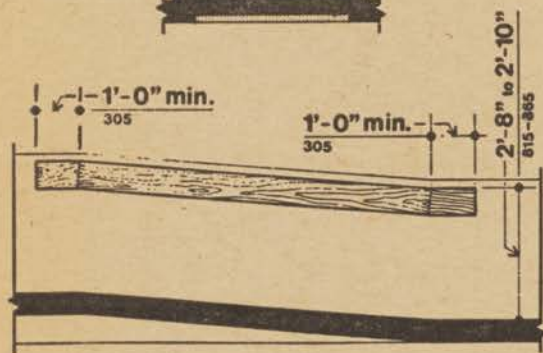
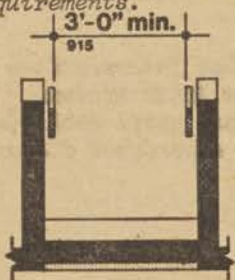


ramp with curb

ANSI Figure 17(a)

Note: ANSI does not specify handrail height requirements.

7.13

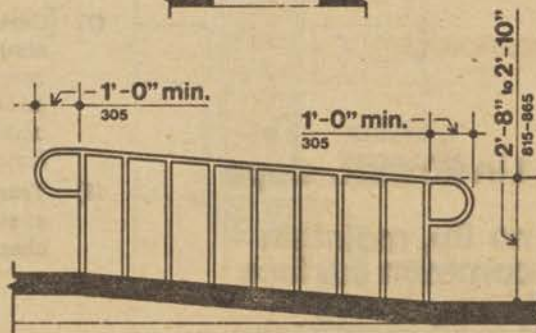


ramp with wall

ANSI Figure 17(b)

Note: ANSI does not specify handrail height requirements.

7.14



ramp with vertical guard

ANSI Figure 17(c)

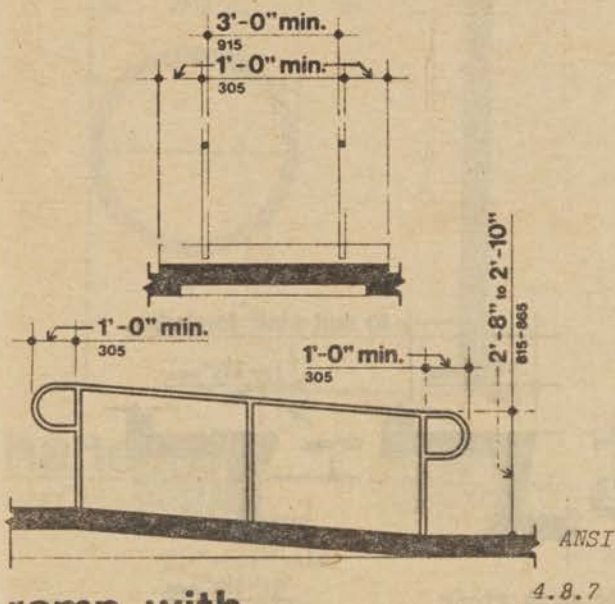
Note: ANSI does not specify handrail height requirements.

7.15

ANSI

(f) Ramps. In addition to the requirements of paragraphs 1190.70 (a), (b), (c), and (d) provide the following at all ramps:

- 4.8.4 (1) Provide landings at the top, bottom, and at changes of direction. If ramp runs exceed max. projection given in figs. 7.2 and 7.3, provide intermediate landings. Landings shall:
 - 4.8.4 (1) (i) Have a width which shall be at least as wide as the widest ramp run approaching it.
 - 4.8.4 (2) (ii) Have a minimum length of 5'-0" (1,525 mm).
 - 4.8.4 (3) (iii) Have a min. size at direction changes that is 5'-0" by 5'-0" (1,525 mm by 1,525 mm).
 - 4.8.4 (4) (iv) Comply with § 1190.130, Doors, if doors open into them.
- 4.8.5 (2) Provide handrails that comply with § 1190.90, Handrails, on both sides of any ramp run exceeding a 6 in. (150 mm) rise or a 6'-0" (1,830 mm) horizontal projection (figs. 7.13, 7.14, 7.15, and 7.16).



ramp with extended edge

ANSI Figure 17(d)

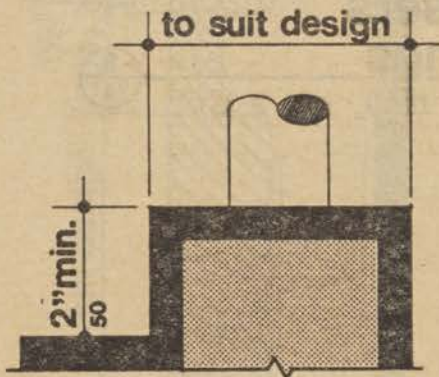
Note: ANSI does not specify handrail height requirements.

7.
16

4.8.8

- (3) Provide curbs, walls, vertical guards or projected edges at ramps and landings with drop-offs. Min. curb height shall be 2 in. (50 mm) (fig. 7.17).

- (g) Exterior condition. Curb ramps, ramp, and landing surfaces shall comply with paragraph 1190.50 (i) (2), Drainage.



ramp curb

ANSI Figure 17(a)

7.
17

ANSI

§1190.80 Stairs

- (a) **General.** Stairs required by Subpart C—Scope shall comply with this section.

- 4.9.2 (b) **Risers.** Provide risers that do not exceed 7 in. (180 mm) in height.

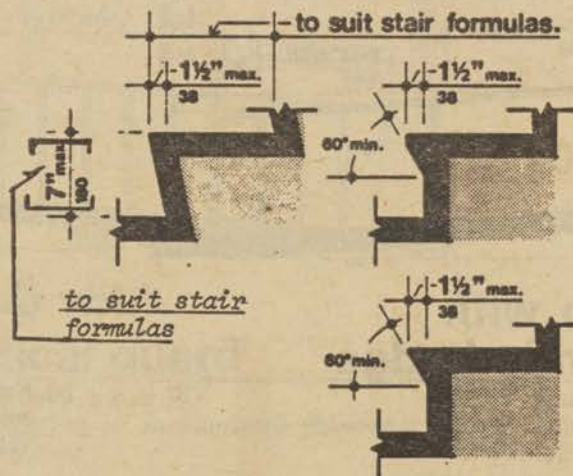
TREADS AND RISERS.
On any given flight of stairs, all steps shall have a uniform riser height and uniform tread widths. Stair treads shall be no less than 11 inches (280 mm) wide, measured from riser to riser. Open risers are not permitted (fig. 8.1).

- 4.9.3 (c) **Nosings.** Nosings shall:

- (1) Project a max. of 1-1/2" (38 mm);
- (2) Have a leading edge with a max. radius of curvature of 1/2 in. (13 mm); and
- (3) Be formed by risers that are sloped, or shall have undersides of the nosings which form an angle not less than 60 degrees from the horizontal (fig. 8.1).

- 4.9.4 (d) **Handrails.** Provide continuous handrails at both side of stairways. Handrails shall comply with § 1190.90, Handrails.

- 4.9.6 (e) **Exterior conditions.** Stair treads and landing surfaces shall comply with paragraph 1190.50 (i) (2), Drainage.

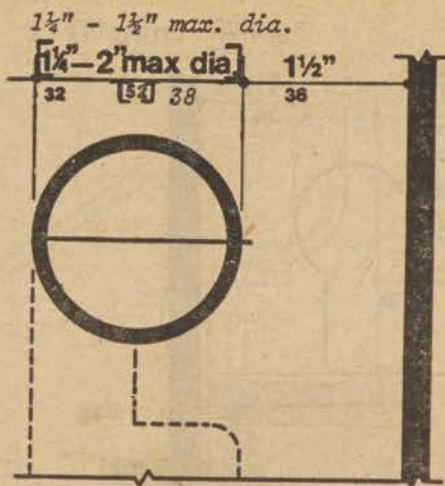


stair risers & nosings

ANSI Figure 18(a), (b), & (c)

8.
1

Note: ANSI 4.9.5 Tactile Warnings at Stairs has been deleted from the ATBCE Minimum Guidelines and Requirements for Accessible Design until such time as sufficient research and/or field experience dictate a requirement in this area.



handrail

ANSI Figure 39(a)

9.
1

ANSI

4.8.5

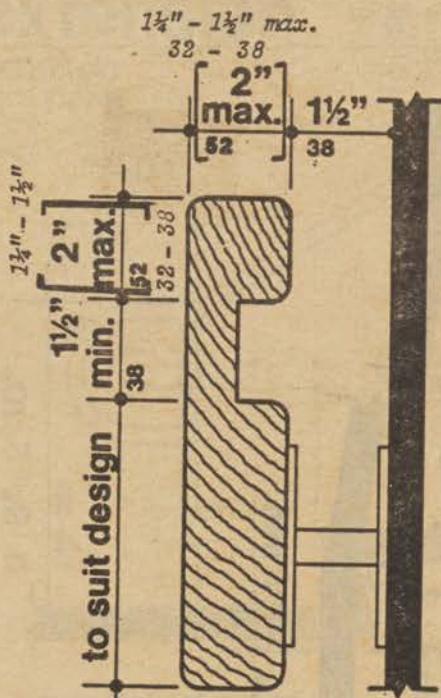
4.9.4

§1190.90 Handrails

(a) **General.** Handrails for ramps or stairs required by Subpart C—Scope shall comply with this section.

4.26.2 (b) **Size and spacing.** Size and spacing of handrails shall:

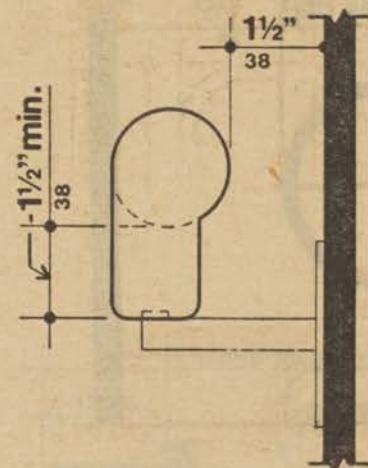
- (1) The handgrip portion of the handrail, if round, shall be not less than 1-1/4 in. (32 mm) nor more than 2 in. (50 mm) $\Rightarrow$ 1 1/2 in. (38 mm) $\Leftarrow$ in diameter (fig. 9.1). If the shape of the handrail is not round, then the larger dimension shall be not more than 2 in. (50 mm) $\Rightarrow$ 1 1/2 in. (38 mm) $\Leftarrow$ (fig. 9.2).



handrail

ANSI Figure 39(b), (c), & (d)

9.
2



ANSI

4.26.2

- (2) If handrails are mounted adjacent to walls or other surfaces, provide a 1-1/2 in. (38 mm) (min./max.) clear space between the surface and the handrail (figs. 9.1, 9.2, 9.3, and 9.4). The handrail and the surfaces adjacent to the handrail shall be free of any sharp or abrasive elements. Edges shall have min. radius of 1/8 in. (3 mm). Free-standing rails located farther than 6 in. (150 mm) from wall or other vertical surfaces are not subject to this provision.

4.26.2

- (3) Handrails may be mounted in recesses if the recesses comply with fig. 9.4

4.8.5(1)

& 4.9.4

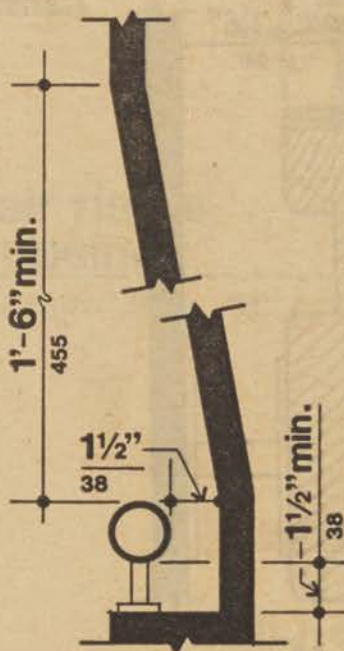
- (4) On switchbacks or dog-leg ramps or stairs, inside handrails shall be continuous.

handrail

ANSI Figure 39(d)

9.

3

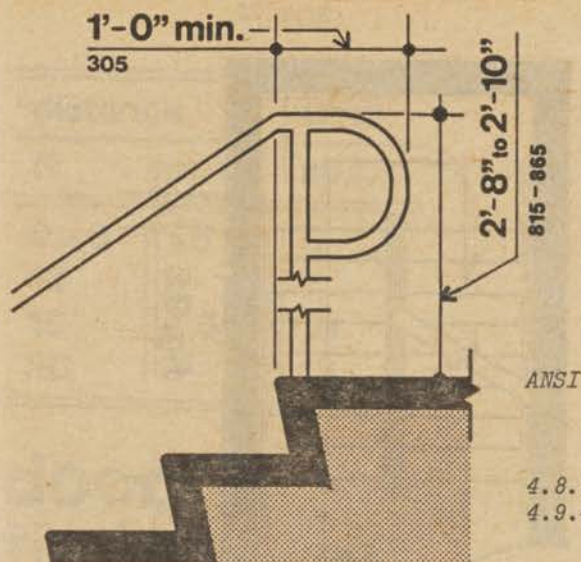


handrail

ANSI Figure 39(d)

9.

4

**(c) Handrail projections.**

- (1) If outside handrails are not continuous then:

4.8.5(2) &
4.9.4(2)

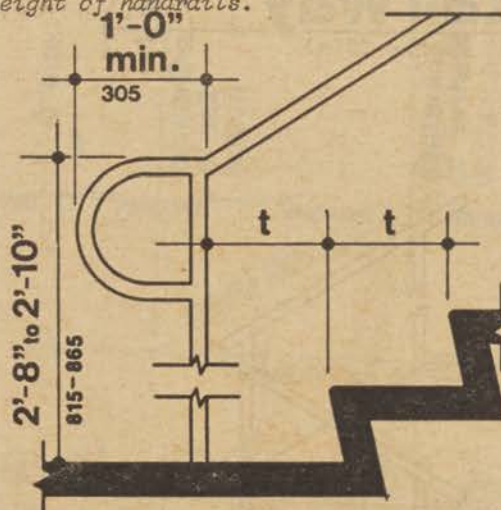
- (i) At a ramp landing, handrails shall project parallel with ramp or landing surface for a length of 1'-0" (305 mm) beyond the top and bottom of ramp surfaces (figs. 7.13, 7.14, 7.15, and 7.16).
- (ii) At a stair landing, handrails shall project at least 1'-0" (305 mm) beyond the top riser and at least 1'-0" (305 mm) plus the depth of one tread beyond the bottom riser. The 1'-0" (305 mm) projection shall in each instance be parallel with the floor (figs. 9.5 and 9.6).
- (iii) Exception. Full extension of handrails shall not be required in alterations where such extensions would be hazardous or impossible due to plan configurations.

- (2) Gripping surfaces shall not be interrupted with newel posts, balusters, or other obstructions.

extension**handrails**

ANSI Figure 19(d)

Note: ANSI does not specify the height of handrails.

**extension****handrails**

ANSI Figure 19(c)

Note: ANSI does not specify the height of handrails.

ANSI

no sim-ilar provision (d) **Mounting height.** Mount handrails for accessible stairs and ramps at a height of 2'-8" to 2'-10" (815 mm to 865 mm) above stair nosing(s) or ramp surface as applicable (see figs. 7.13, 7.14, 7.15, 7.16, 9.6, and 9.7).

no sim-ilar provision (e) **Structural strengths.** Handrails, as installed, shall support a min. momentary concentrated load applied at the top edge of 200 lbs. (91 kg) horizontally and 30% of that load vertically downward. Where the railing system is installed in public assembly occupancies, the loading shall be increased 50%. Handrails shall not rotate within their fittings. Handrails of material other than metal shall meet the same structural requirements.

Fig. 19 (c) & (d); no similar text (f) **Hazards.** Ends of free-standing handrails shall be either rounded or returned smoothly to floor or post (see paragraph 1190.50(c), Protruding objects.)

4.10 §1190.100 Elevators.

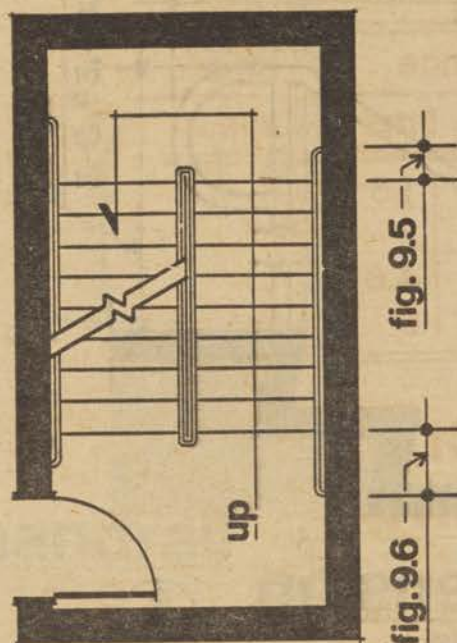
4.10.1 (a) General.

- (1) Elevators required by Subpart C—Scope shall comply with this section. For additional information see the American National Standard Safety Code for Elevators, Dumbwaiters, Escalators and Moving Walks, A17.1, and see also National Elevator Industry, Inc. (NEII) Suggested Minimum Elevator Requirements for the Handicapped.
- (2) Freight elevators shall not be considered as meeting the requirements of this section. unless the only elevators provided are used as combination passenger and freight elevators for the public and employees.

4.10.2 (b) **Operation and leveling.** Elevators shall be automatic and shall be provided with a self-leveling feature that will automatically bring the car to the floor landing within a tolerance of 1/2 in. (13 mm) under normal loading and unloading conditions. The self-leveling feature shall, within its zone, be entirely automatic and independent of the operating device and shall correct for over-travel or under-travel and shall maintain the car approximately level irrespective of loading conditions.

4.10.7 (c) **Elevator door operation.** Elevator doors shall be a min. of 3'-0" (915 mm) wide and automatic door controls shall comply with the following requirements:

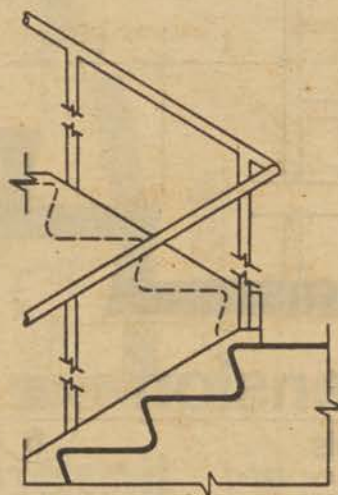
- (1) The min. acceptable time from notification that a car is answering a hall call until the doors of that car start to close shall be as indicated in fig. 10.1 and as cal-



stairway

ANSI Figure 19(a)

9
7



Elevation of Center Handrail

ANSI Figure 19(b)

9
8

-culated from the following equation:

$$T = \frac{D}{1.5 \text{ ft/s}} \quad \text{or} \quad T = \frac{D}{455 \text{ mm/s}}$$

where T = total time in seconds and D = distance in feet or millimeters. ◀

The travel distance shall be established from a point in the center of the corridor or lobby (max. of 5'-0" (1,525 mm) directly opposite the farthest hall button to the centerline of the farthest hoistway entrance (fig. 10.2). ▶ and Table 10.1. ◀

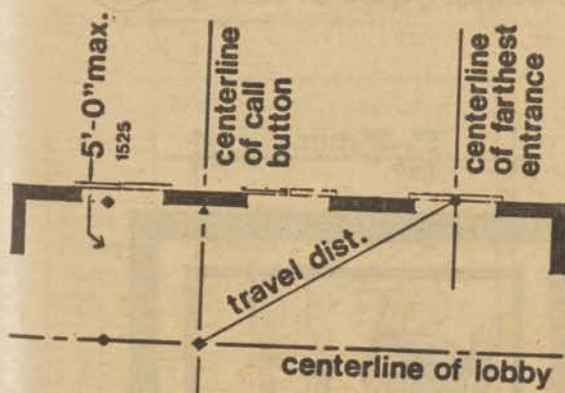
distance		time
ft	m	sec
0 to 5	1.5	5
10	3	7
15	4.5	10
20	6	13

door timing

ANSI Figure 21

Note: ANSI uses the graph shown at proposed table 10.1.

10.
1



travel distance

ANSI Figure 21

10.
2

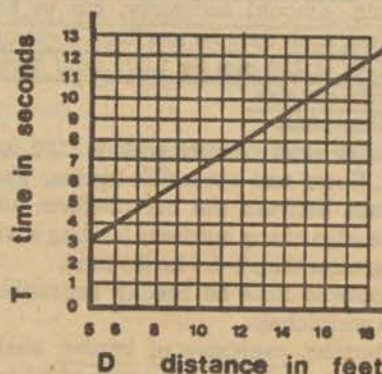


Table 10.1
Graph of Timing Equation ◀

ANSI Figure 21

- (2) Doors shall remain fully open for a min. of ▶ 3 ◀ [5]seconds.
- (3) Provide doors with a reopening device which will function to stop and reopen the car door and adjacent hoistway door in case the car door is obstructed while the door is closing. This reopening device shall also be capable of sensing an object or person in the path of a closing door without requiring contact for activation at a nominal height of 5 in. and 2'-5" (125 mm and 735 mm) above finish floor. Such devices shall remain effective for a period of not less than 20 seconds. For additional information, see ANSI A17.1.
- ▶ (i) Exception. If a safety door is provided in existing automatic elevators, then the automatic door reopening devices may be omitted.
- (ii) Reserved. ◀

ANSI

Page 27

(d) Elevator cars.

- 4.10.9 (1) The minimum floor areas of elevator cars shall comply with figs. 10.3 and 10.4.

► The floor area of elevator cars shall provide space for wheel-chair users to enter the car, maneuver within reach of controls, and exit from the car. ◀

no similar
ANSI
provision

- (i) Exception. Where existing shaft or structural elements prohibit strict compliance in alteration work, these dimensions may be reduced by the min. amount necessary, but in no case shall they be less than 4'-0" by 4'-0" (1,220 mm by 1,220 mm) clear min. car size.

(ii) [Reserved].

- 4.9.10 (2) Car floors shall comply with § 1190.50, Walks, floors and accessible routes. The clearance between the car platform sill and the edge of any hoistway landing shall be no greater than 1-1/4 in. (32 mm).

- 4.10.12 (3) Car controls shall be readily accessible from a wheelchair.

- 4.10.12(1) (i) Buttons, exclusive of border, shall have a minimum dimension of 3/4 in. (19 mm) and shall be raised or flush* with the operating panel. Depth of flush buttons when operated shall not exceed 3/8 inch.*

- (ii) Provide a visual signal indicating when each call is registered and answered.

- 4.10.12(3) (iii) Mount the highest floor buttons at a max. of 4'-0" (1,220 mm) above the floor and the lowest buttons at a min. of 2'-11" (890 mm) above the floor (fig. 10.5).

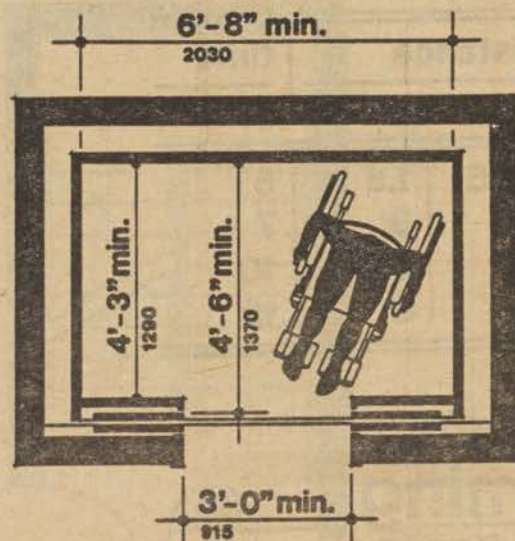
ANSI
permits
4'-6"
(1370 mm)
max. for
highest
button

(A) Exception. If there is a substantial increase in cost as a result of the 4'-0" (1,220 mm) requirement, the highest floor buttons may be mounted at a max. of 4'-6" (1,370 mm).

(B) [Reserved].

- 4.10.12(3) (iv) Group emergency buttons at the bottom of the panel with their centerlines no lower than 2'-11" (890 mm).

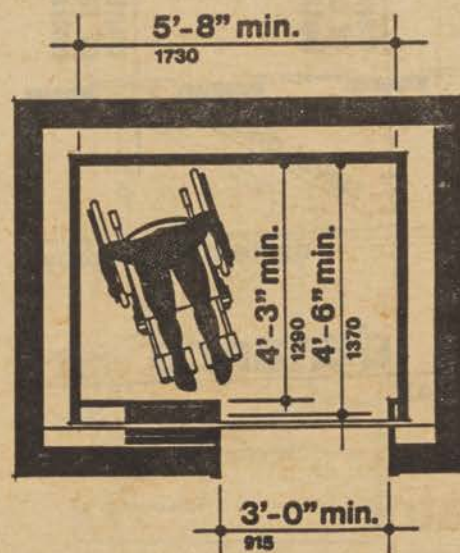
* The ATCB requests comments on whether or not to permit the use of recessed buttons at 1190.100(d)(3)(i).



elevator car center opening

no similar figure in ANSI

10.
3

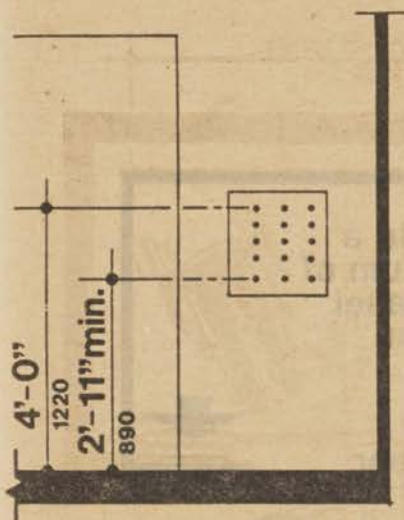


elevator car side opening

ANSI Figure 22

Note: ANSI uses 4'-6" as the maximum mounting height for the highest button

10.
4



control panel

ANSI Figure 23(b)

Note: ANSI uses 4'-6" as the maximum mounting height.

10.
5

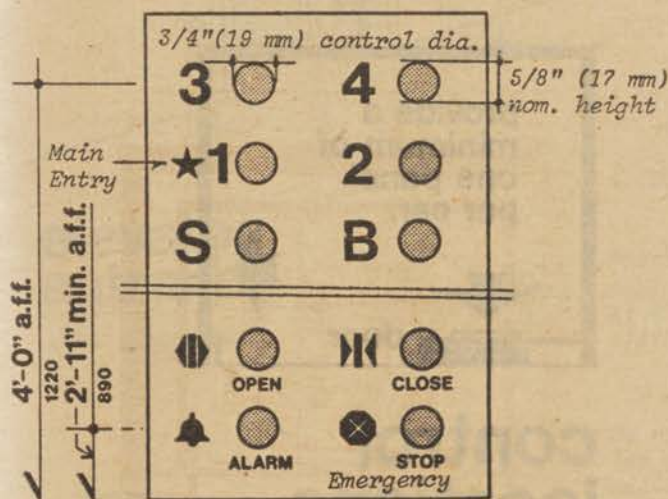
ANSI

4.10.12(2) (v)

Note: ANSI incorporates A17 by ref.

* Designate all control buttons by raised standard alphabet characters for letters, arabic characters for numerals, or standard symbols as shown in fig. 10.6. For additional information see ANSI A17.1 and see also NEII Suggested Minimum Elevator Requirements for the Handicapped. Place raised designations to the immediate left of the button to which they apply. Permanently attached, applied plates are acceptable. Locate the call button for the main entry floor in the left-most column and designate it with a raised star as shown in fig. 10.6. Characters shall comply with §1190.200 Signage.

(vi) Locate control panels as shown in figs. 10.7 and 10.8.



* The ATBCB requests comments on whether or not to permit the use of indented or incised alphabet characters, numerals, or symbols on elevator control buttons.

elevator control panel

ANSI Figure 23(a)

10.
6

ANSI

- 4.10.5 (e) **Door jamb markings.** Provide floor designation markings at each hoistway entrance on both jambs and that comply with the following:

(1) The center lines of characters shall be located 5'-0" (1,525 mm) above finish floor; and

- 4.10.3 (2) Characters shall be a minimum of 2 in. (50 mm) high and shall comply with § 1190.200, Signage.

(3) Permanently applied plates are acceptable (fig. 10.9).

(f) **Lobby call buttons.**

- (1) Call buttons shall:

(i) Be mounted with centerlines at 3'-6" (1,065 mm) above finish floor (fig. 10.9);

(ii) Be a minimum of 3/4 in. (19 mm) in diameter;

(iii) Have visual signals indicating when a call is registered and answered;

no similar provision

* (iv) Be raised or flush; and
(v) Have the button designating "up" mounted on top.

- (2) Objects mounted beneath lobby call buttons shall not project into the elevator lobby more than 4 in. (100 mm).

- 4.10.4 (g) **Hall lanterns.** Provide an audible and visual signal at each hoistway entrance to indicate car arrival and its travel direction.

(1) Audible signals shall sound once for the up direction and twice for the down direction or shall annunciate the words "up" or "down".

- 4.10.4(1) (2) Visual signals shall:

(i) Be mounted with their centerlines a min. of 6'-0" (1,830 mm) above finish floor (fig. 10.9);

- 4.10.4(2) (ii) Have a min. dimension of 2-1/2" (64 mm);

* The ATBCB request comment on whether or not to permit the use of indented or incised lobby call buttons.



control locations

center opening

ANSI Figure 23(a)

10.
7

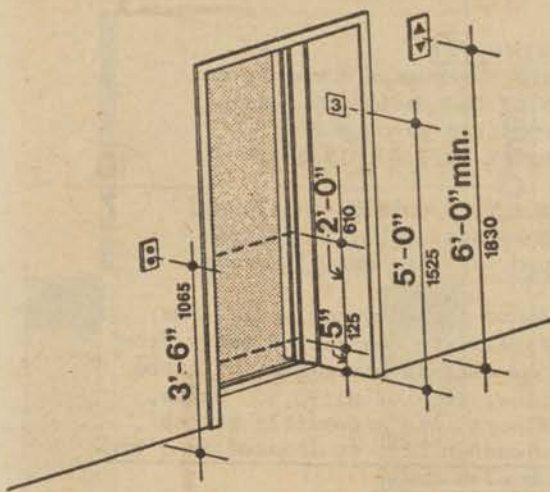


control locations

side opening

ANSI Figure 23(d)

10.
8



**elevator
entrance**

ANSI Figure 20

$$\frac{10.}{9}$$

ANSI

- ANSI
- (iii) Distinctive between up and down travel directions; and
- 4.10.4(3) (iv) Be visible from the vicinity of call buttons.
- 4.10.4(3) (3) In-car lanterns mounted on car door jambs and that comply with paragraph 1190.100 (7) (2) are acceptable.
- 4.10.13 (h) **Car position indicator and signal.** Provide audible and visual car position indicators within each elevator car as follows:
- (1) Audible indicators shall:
- (i) Signal as the car passes or stops at each landing. Signal shall exceed the ambient noise level by at least 20 decibels with a frequency [below] of 1,500 Hz; or to 2,000 Hz; or
- (ii) Provide an automatic verbal announcement.
- 4.10.13 (2) Visual indicators shall:
- (i) Be located above the car operating panel or over the car door;
- (ii) Visually display the floor number as the car passes or stops at a landing;
- (iii) Have characters that are a minimum of 1/2 in. (13 mm) high and that comply with §1190.200, Signage, except for paragraph 1190.200(c) (2).

- 4.10.11 (i) **Illumination levels.** Illuminate car controls, platform, car threshold, and landing sill to a minimum of 5 footcandles.

- 4.10.14 (j) **Intercommunication systems.** If provided, emergency intercommunication systems shall comply with the following:

Note:

- Note: (1) Locate the highest operable part of the system no higher than 4'-0" (1,220 mm) above car floor;
- ANSI permits 4'-6" (1370 mm) (2) Identify the system with raised lettering or symbols complying with §1190.200, Signage; *and locate adjacent to the device.*
- * (3) If system employs a handset, provide a 2'-5" (735 mm) cord length;
- No similar provisions in ANSI. (4) If system is located in a closed compartment, compartment door hardware shall conform to §1190.170, Controls and operating mechanisms;
- (5) Provide a momentary contact button to allow hearing-impaired individuals to summon assistance.

No similar provisions in ANSI.

* The ATCB requests comments on whether or not indented or incised lettering or symbols should be permitted to identify the emergency intercommunication system.

ANSI

4.11 §1190.110 Platform lifts.

(a) **General.** Platform lifts required by Subpart C—Scope, shall comply with this section.

4.11.2 (b) **Requirements.** Platform lifts shall:

4.2.4 (1) Accommodate an occupied wheelchair within the space provisions of §1190.40, Human data;

4.5 no sim- * (2) Facilitate unassisted entry and exit from the lift in accordance with the provisions of §1190.50, Walks, floors, and accessible routes;

4.11.2 (3) Have accessible controls complying with §1190.170, Controls and operating mechanisms; and

4.27 (4) Satisfy safety requirements of the agency having responsibility for safety of the facility.

4.11 §1190.120 Entrances.

(a) **General.** Entrances required to be accessible by Subpart C—Scope shall comply with §1190.50, Walks, Floors and Accessible Routes; §1190.120, Entrances; and §1190.130, Doors.

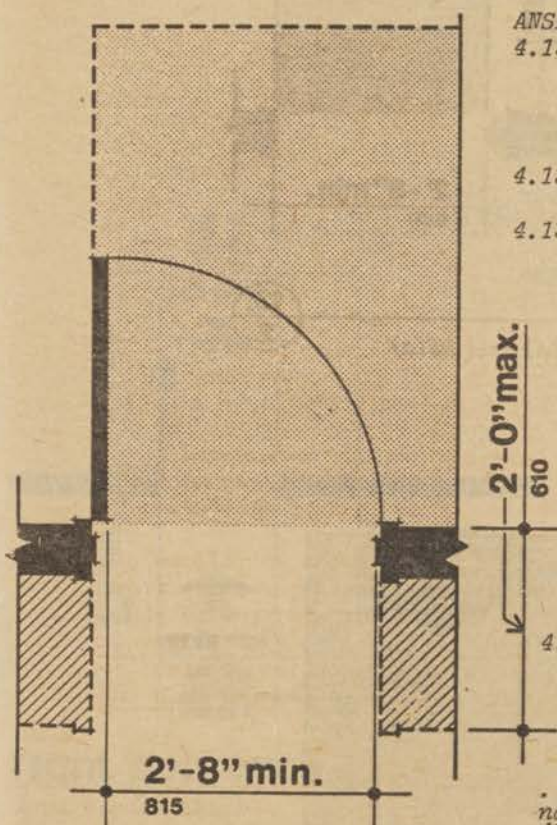
4.11.2 (b) **Service entrances.** A service entrance is not to be used as the only accessible entrance unless it is the only entrance to the building or facility.

(c) **Access to elevators.** If elevators are provided, an accessible route shall be provided from an accessible entrance to the elevators.

* 1190.110(a)(2)

The ATBCB requests comments on which of the following three alternatives is preferred for inclusion at 1190.110(b):

1. Retain provision as adopted on January 6, 1981 (language provided in text of notice).
2. Amend the language as follows:
Facilitate unassisted entry from the lift in accordance with the provisions of §1190.50 Walks, floors, and accessible routes whenever lift is located in a controlled area.
3. Delete paragraph.



hinged

ANSI Figure 24(b) and (e)

ANSI

4.13

§1190.130 Doors.

(a) **General.** Doors required to be accessible by Subpart C—Scope shall comply with this section.

4.13.3 (1) Gates, including ticket gates, shall comply with this section.

4.13.4 (2) In double-leaf doorways, at least one leaf shall comply with this Section and it shall be the active leaf. Double-leaf automatic doors are excepted from the one leaf provision if both leaves are automatic.

4.13.2 (3) Revolving doors or turnstiles are not accessible doors and shall not be the sole means of access at any accessible entrance or on any accessible route. An accessible door shall be provided immediately adjacent to the turnstile or revolving door and shall be subject to the same use pattern as the turnstile or revolving door, so designed as to facilitate the same use patterns.

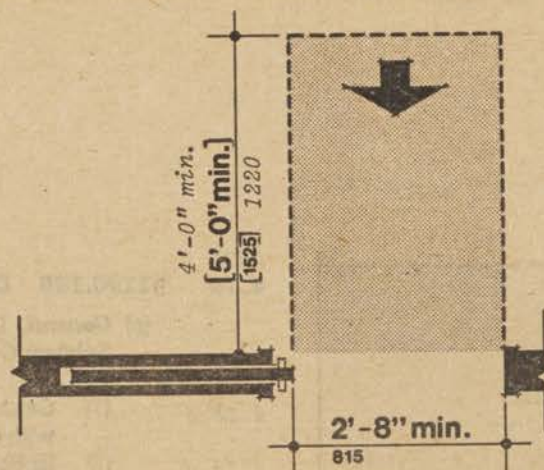
4.13.5(b) **Clear width.** Provide doorways with clear openings of 2'-8" (815 mm) as measured with the door open 90 degrees between the face of the door and the latch side stop (figs. 13.1, 13.2, and 13.3). Openings deeper than 2'-0" (610 mm) shall be a min. of 3'-0" (915 mm) wide (fig. 4.1).

no similar provision

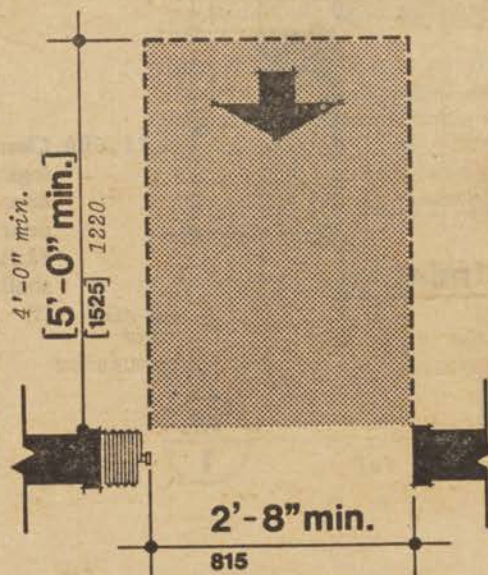
(1) **Exception.** If a space and the elements within that space comply with the requirements of §1190.40, Human Data, and the user does not require full passage into that space, then the opening to that space may be min. of 1'-8" (510 mm) wide.

(2) [Reserved]

13.
1

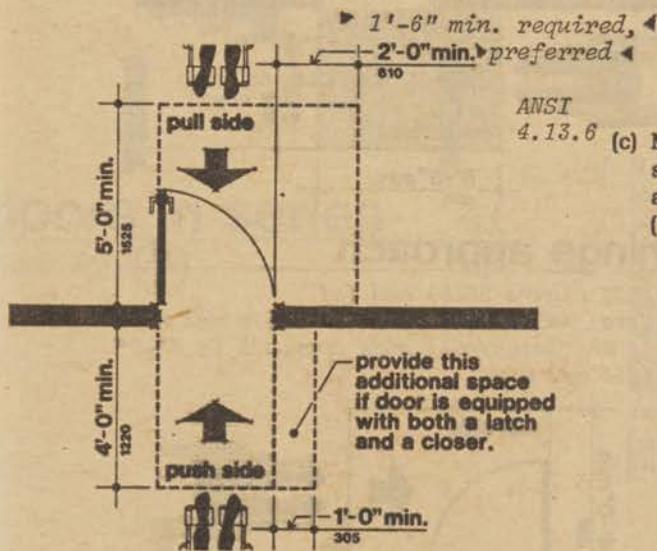
**sliding**

ANSI Figure 24(c) and 25(a)

13.
2**folding**

ANSI Figure 24(d) and 25(a)

13.
3



front approach

ANSI Figure 25(a)

Note: ANSI requires 2'-0" min. latch side clearance.

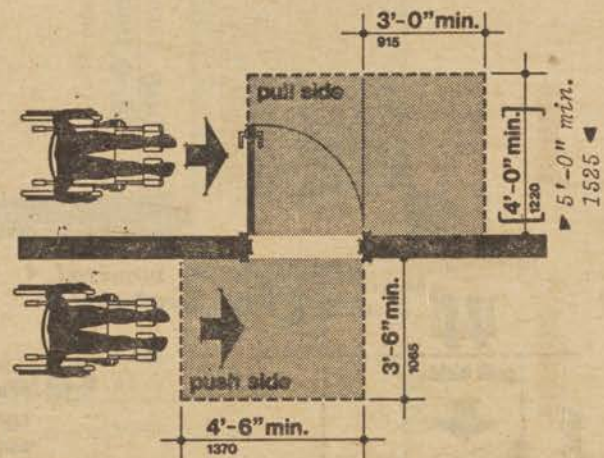
13.
4

(c) Maneuvering space. Provide the following space at all non-automatic and non-power-assisted doors:

- (1) At doors allowing front approach only, maneuvering space shall be as shown in figs. 13.2, 13.3, and 13.4. The min. maneuvering space (i.e., latch side clearance) required for a hinged opening is 1'-6" (455 mm), but 2'-0" (600 mm) is recommended where space is available.
- (i) Exception. Front approach entry doors to acute care hospital patient bedrooms shall be exempt from the 1'-6" (455 mm) requirement of paragraph 1190.130(c)(1) latch side clearance shown in fig. 13.4 if the door is at least 3'-6" (1,120 mm) wide.
- (ii) [Reserved]

ANSI
4.13.6

- (2) At doors allowing hinge side approach only, maneuvering space shall be as shown in fig. 13.5.
- (3) At doors allowing latch side approach only, maneuvering space shall be as shown in fig. 13.6.
- (4) The floor or surface area within the required maneuvering space shall be clear and shall comply with paragraph 1190.50(i), Ground and floor surfaces. It shall have a slope in any direction no greater than 1:48 (1/4 in. per ft.)

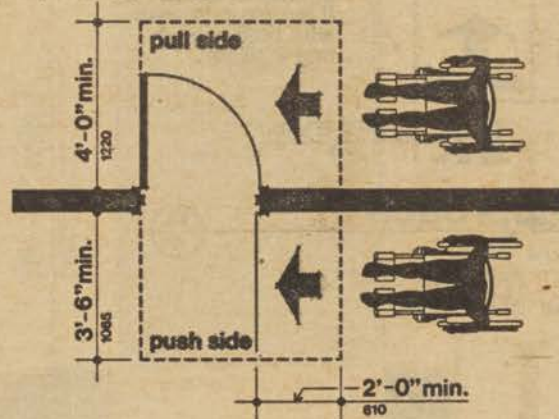


hinge approach

13.
5

ANSI Figure 25(b) and (e)

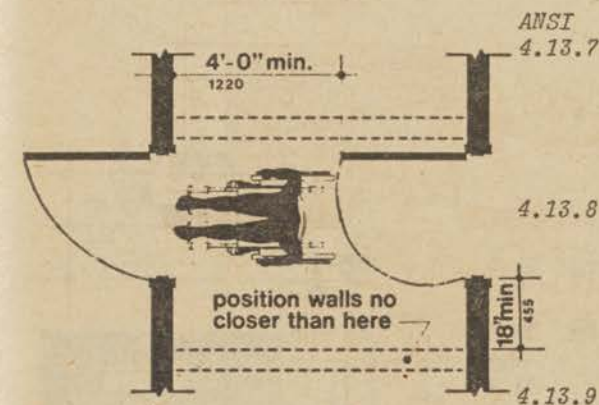
Note: ANSI requires 5'-0" (1525 mm) min. if the latch/pull side approach is 3'-0" (915 mm) min.



latch approach

13.
6

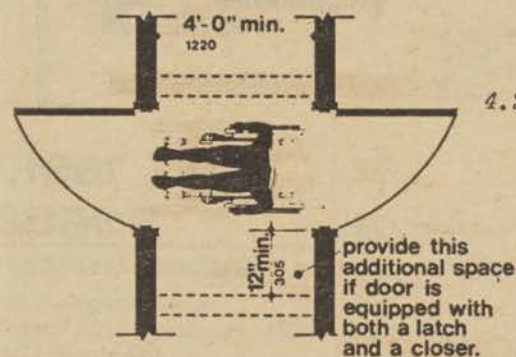
ANSI Figures 25(c) and (f)



doors in series

ANSI Figure 26

13.
7



doors in series

ANSI Figure 26

13.
8

ANSI 4.13.7 (d) **Doors in series.** Between any two hinged or pivoted doors in series, provide a min. of 4'-0" (1,220 mm) plus the width of any door swinging into the space. Opposing doors shall not swing towards each other, into the intervening space (see figs. 13.7 and 13.8).

4.13.8 (e) **Thresholds.** Raised thresholds, if provided, shall be beveled with a slope not to exceed 1:2 and with heights not exceeding the following:

- (1) Exterior sliding doors: 3/4 in. (19 mm) max.
- (2) Other doors: 1/2 in. (13 mm) max. Bevel not required if less than 1/4 in. (6 mm).

(f) **Hardware.** Provide handles, pulls, latches, locks and other operating hardware that are easy to grasp with one hand and that do not require twisting of the wrist, tight grasping, or tight pinching to operate. Acceptable designs include, but are not limited to, lever-operated hardware, push-type hardware, and U-shaped handles. Operating hardware shall be exposed and usable from both sides when sliding doors are fully open. Mount no operating hardware higher than 4'-0" (1,220 mm) above finish floor.

(1) **Exception.** Mortise and surface mounted bolts used to secure the inactive leaf of a double leaf door without center mullion may be mounted at any height.

(2) [Reserved.]

4.29.3 (g) **Doors to hazardous areas.** Provide a textured surface on any door handle, knob, pull, or other piece of operating hardware on doors that lead to areas that may prove hazardous to blind people. Such areas may include, but are not limited to, loading platforms, mechanical equipment rooms, stages, and similar spaces. Textured surfaces may be achieved by knurling, roughening, or applying materials on the hand contact surface. Do not provide textured surfaces on hardware leading to emergency egress or on any doors other than those leading to hazardous areas.

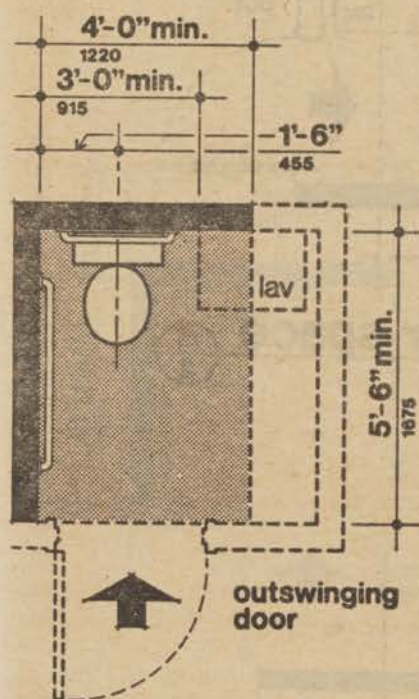
Note: ANSI also addresses doors at accessible entrances to dwelling units at 4.29.3.

ANSI

4.13.10 (h) Closers and opening forces.

- (1) Door closers, if provided, shall have a sweep period adjusted so that from a position of 70 degrees open it will take the door a min. of ~~5~~ 3-4 seconds to reach a point 3 in. (75 mm) from the door jamb, measured from the leading edge of the door.
- 4.13.11 (2) Max. pushing or pulling opening forces for doors shall be as follows:
 - 4.13.11(2)(a) (i) Exterior hinged doors: [Reserved]
 - 4.13.11(2)(b) (ii) Interior hinged doors: 5 lbs. (2.3 Kg)
 - 4.13.11(2)(c) (iii) Sliding or folding doors: 5 lbs. (2.3 Kg)
 - 4.13.11(1) (iv) Adjust fire doors for the min. opening and closing forces required by the agency having responsibility for the safety of the facility.
 - 4.13.2 (v) Power-assisted doors: Comply with paragraph 1190.130(h)(2) for closing force. These forces do not apply to forces required to retract or disengage latch bolts or other door latching devices.
- 4.13.12 (i) Automatic doors. If automatic pedestrian doors are provided:
 - (1) They shall not open to back check in less than ~~5~~ 3-4 seconds; and
 - (2) They shall not require more than 15 lbs. (6.8 Kg) to stop door movement;
 - (3) See the American National Standard for Power-Operated Pedestrian Doors, ANSI A156.10 (latest edition) for additional information on the requirements for both standard and custom designed installations. Paragraph 1.1.1 of the ANSI publication contains information on slow opening, low powered automatic pedestrian doors.

Note: ANSI requires that exterior hinged doors have a maximum pushing and pulling opening forces of 8.5 lbf (37.8N).



clear floor space

(right-hand approach)

15.
1

ANSI Figure 28(a)

Note: ANSI does not illustrate wall location.

4.12 §1190.140 Windows [Reserved]

4.16 §1190.150 Toilet and bathing facilities.

4.17 (a) **General.** Toilet rooms and bathing facilities required to be accessible by Subpart C—Scope shall comply with this section.

4.18 (1) **Exception.** Where alterations to existing facilities make strict compliance with §1190.150 structurally impracticable, the addition of one "unisex" toilet per floor containing one water closet and one lavatory that complies with paragraph §1190.150(b) located adjacent to existing facilities will be acceptable in lieu of making existing toilet facilities for each sex accessible.

4.20 (2) [Reserved]

4.22.2 (b) **Doors.** Doors to toilet rooms and bathing facilities shall:

- 4.23.2 (1) Comply with §1190.130, Doors; and
4.13 (2) Not swing into clear floor spaces required at fixtures.

Note: ATBCB has reserved §1190.140 Windows until such time as research and/or field experience dictates a requirement in this area. ANSI requires a maximum of 5 lbf (22.2N) to open and close accessible windows.

ANSI

- 4.22.3 (c) **Clear turning space.** Each accessible toilet room and bathing facility shall have an unobstructed turning space that:

4.23.3

4.2.3

- (1) Complies with paragraph 1190.40(b)(3);
- (2) Adjoins an accessible route complying with §1190.50, Walks, floors, and accessible routes; and
- (3) May overlap the accessible route and clear floor space at fixture(s).

- (i) Exception. [In toilet rooms with one water closet, doors in a clear floor area that is 2'-8" by 5'-0" (815 mm by 1525 mm) may be provided in lieu of a clear turning space.]

- In bathrooms with one water closet, one lavatory and/or shower, a clear floor space of 2'-6" by 5'-0" (815 mm x 1525 mm) may be used in lieu of the unobstructed turning space.

- (ii) [Reserved]

- 4.30.1 (d) **Signage.** Signage required by Subpart C—Scope that identifies accessible toilet rooms and bathing facilities shall comply with 1190.200, Signage.

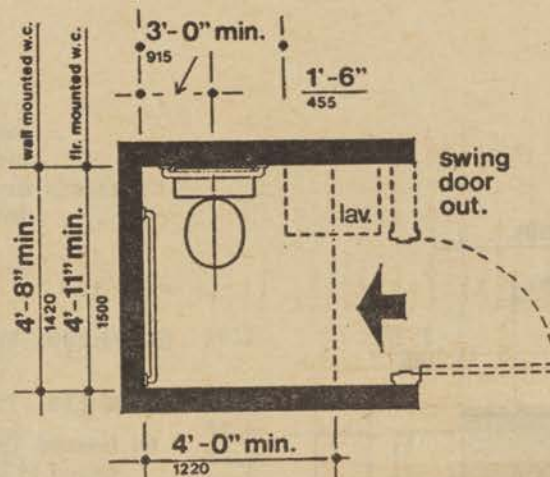
- 4.16 (e) **Toilet fixtures and accessories.**

- 4.22.4 (1) Water closets. Accessible water closets shall:

4.23.4

- (i) Be provided with clear floor access spaces complying with figs. 15.1, 15.2, 15.3 and 15.4 for fixtures not mounted in stalls. Clear floor space may be provided to allow either left-handed or right-handed approach.

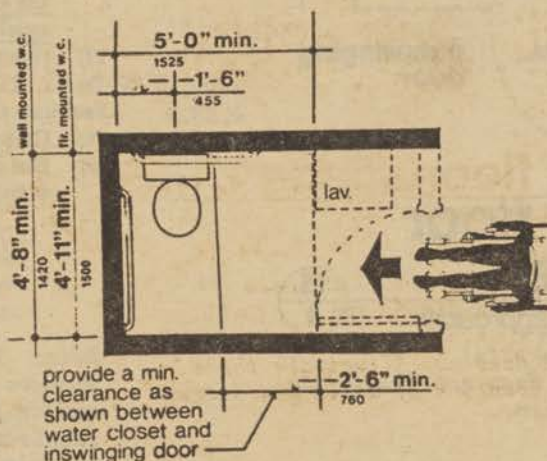
4.16.2



clear floor space

(right-hand approach)

ANSI Figure 28(b)

15.
2

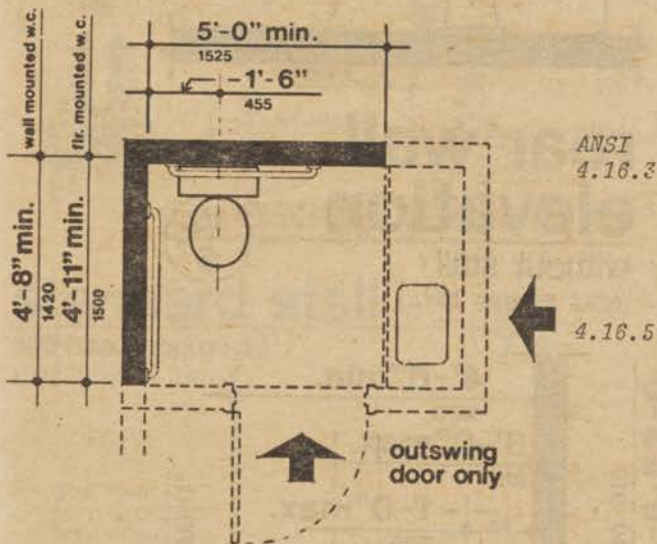
clear floor space

(right-hand approach)

ANSI Figure 28(c)

Note: ANSI does not illustrate the differences in dimensions needed for wall and floor mounted water closets. ANSI also does not show door and wall locations.

15.
3



- (ii) Have top of seats mounted 1'-5" to 1'-7" (430 mm to 485 mm) above finish floor (see figs. 15.5 and 15.6). Seats shall not be sprung to return to a lifted position when not in use.
- (iii) Have automatic or hand-operated flush controls complying with §1190.170, Controls and operating mechanisms. Mount controls for use from the wide side of access area and no higher than 3'-8" (1,120 mm) above finish floor.

clear floor space

(right-hand approach)

15.
4

ANSI Figure 28(c)

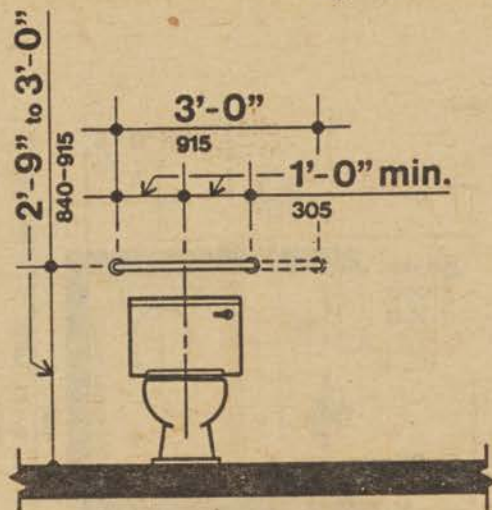
Note: ANSI does not illustrate the differences in dimensions for wall and floor mounted water closets. ANSI also does not illustrate the possible location of walls and doors.

ANSI
4.16.6

- (iv) Have toilet paper dispensers mounted as shown in fig. 15.8. Do not use dispensers that control delivery or that do not permit continuous paper flow.

4.16.4

- (v) Have grab bars mounted of the length and positioning as shown in figs. 15.1, 15.2, 15.3, 15.4, 15.5 and 15.6.

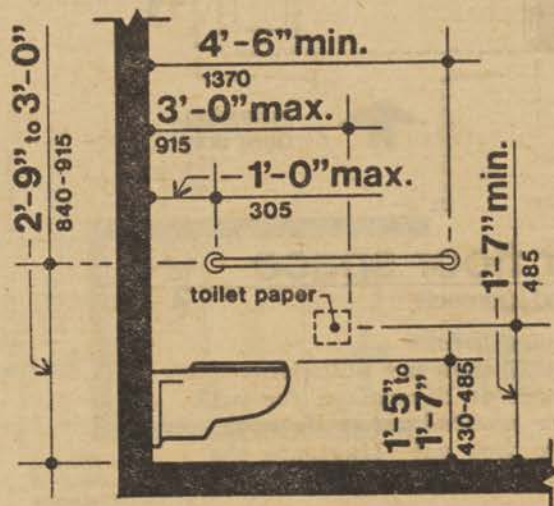


rear wall elevation

without stall

15.
5

ANSI Figure 29(a)

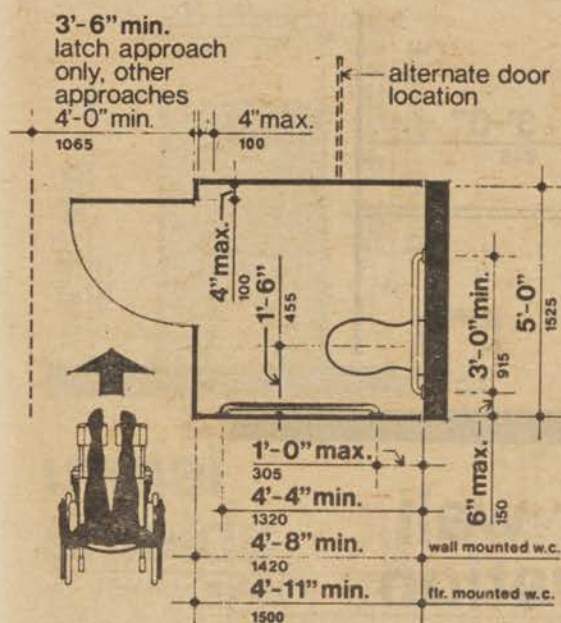


side wall

without stall
or alternate stall15.
6

ANSI Figure 29(b)

Note: ANSI does not provide a dimension from the wall to the toilet paper dispenser



ANSI

4.17 (2)

4.17.3

Toilet stalls. Accessible toilet stalls shall:

- (i) Have a water closet complying with paragraph 1190.150(e)(1); and
- (ii) Be of the size and arrangement as shown in fig. 15.7. Stall configuration may be reversed for left or right-handed approach.

(A) Exception. In instances of alteration work where provision of a standard stall (fig. 15.7) is structurally impractical or plumbing fixture code requirements prevent combining existing stalls to provide space,

an alternate stall (fig. 15.8) may be provided in lieu of the standard stall.

(B) [Reserved] if a standard stall is provided in accordance with the requirements of 1190.31

(k) toilet and bathing facilities.

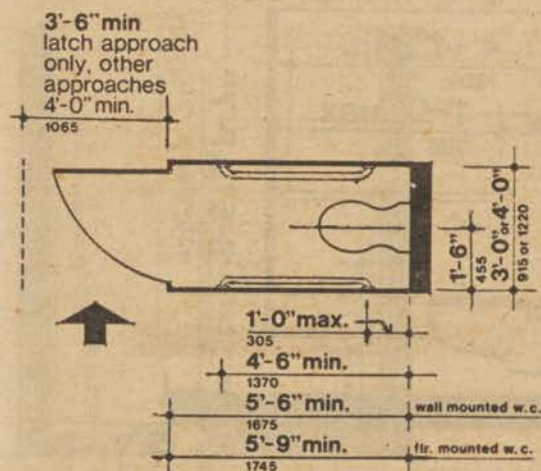
standard stall

(left-hand approach)

ANSI Figure 30(a)

15.

7



alternate stall

Figure 30(b)

15.

8

ANSI
4.17.4

- (iii) Have toe clearances at the front partition and at least one side partition of 9 in. (230 mm) above finish floor. If stall depth is greater than 5'-0" (1,525 mm), then toe clearance is optional.

4.17.5
4.13

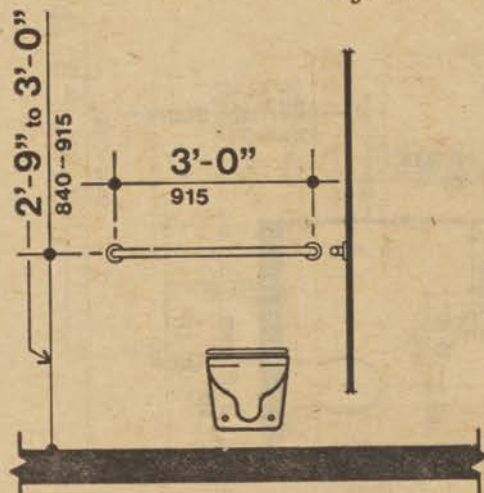
- (iv) Have doors that comply with §1190.130, Doors, and that are out-swinging; and have the symbol of access affixed to the outside of door.

(A) Exception. If toilet stall approach is from the latch side of the stall door, clearance between the door side of the stall and any obstruction may be reduced to a min. of 3'-6" (1,065 mm).

(B) [Reserved]

4.17.6

- (v) Have grab bars mounted of the length and positioning shown in figs. 15.7, 15.8, 15.9 and 15.10. ▸ *Grab bars may be mounted by any desired method as long as they have a gripping surface at the locations shown and do not obstruct the required clear area. Grab bars shall comply with 1190.150(g).* ◀

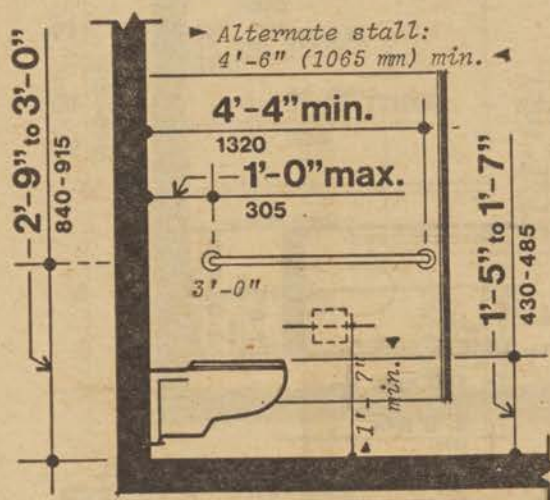


rear wall elevation

standard stall

ANSI Figure 30(c)

15.
9

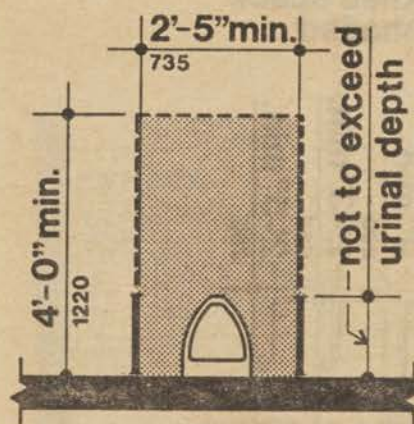


side wall

standard stall

ANSI Figure 30(d)

15.
10



urinal shields

No similar figure in ANSI.

15.
11

ANSI
4.18
4.18.3
4.22.5
4.23.5

(3) Urinals. Accessible urinals shall:

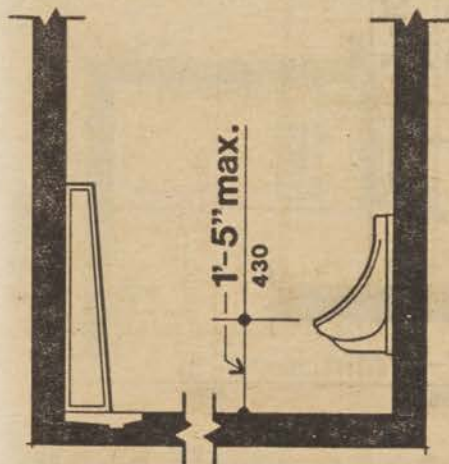
- (i) Have a clear floor space that complies with §1190.40, Human data.

[(A) Exception. Urinal shields that do not extend beyond the front edge of the urinal rim may be provided with 2'-5" (735 mm) clearance between them (fig. 15.11).]

(B) [Reserved]

- (ii) Be floor mounted stall type or wall-hung with an elongated rim mounted at 1'-5" (430 mm) max. above finish floor (fig. 15.12).

4.18.2



urinals

No similar figure in ANSI

15.
12

ANSI

4.18.4

- (iii) Have automatic or hand-operated controls complying with §1190.170, Controls and operating mechanisms, and mounted no higher than 3'-8" (1,120 mm) above finish floor.

4.19

4.22.6

4.23.6

4.19.2

- (4) Lavatories and sinks. Lavatories and sinks shall meet the following requirements:

- (i) Mount lavatories with the rim or counter surface no higher than 2'-10" (865 mm) above finish floor. Provide knee space between bottom of apron and finish floor of at least 2'-5" (735 mm) high, 2'-6" (760 mm) wide and 1'-7" (485 mm) deep (fig. 15.13).

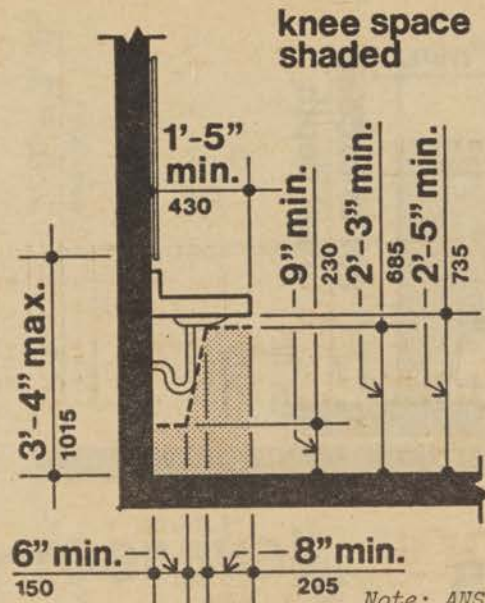
4.24

4.24.2

4.24.3

4.24.4

- (ii) Mount sinks with the rim or counter surface no higher than 2'-10" (865 mm) above finish floor. Provide knee space under the sink of at least 2'-3" (685 mm) high, 2'-6" (760 mm) wide and 1'-7" (485 mm) deep. Sink bowls shall be a max. of 6-1/2 in. (165 mm) deep (fig. 15.14).



knee space shaded

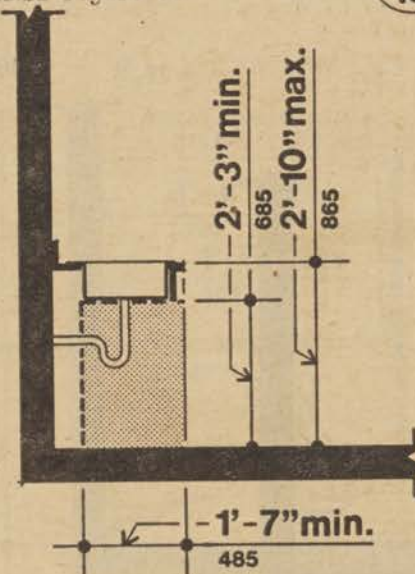
lavatory

ANSI Figure 31

15.

13

Note: ANSI does not address knee space for lavatories.



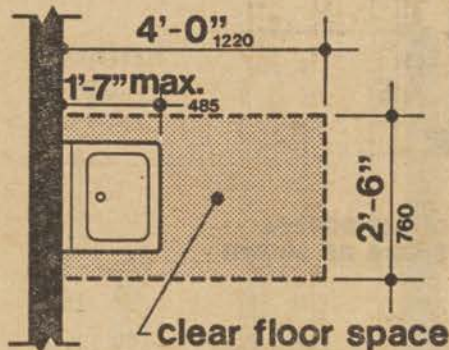
sink

ANSI Figure 51

15.

14

Note: ANSI provides range for sink heights: 2'-4", 2'-8", and 3'-0".



lavatory

ANSI Figure 32

15.
15

ANSI

4.19.3
4.24.54.19.4
4.24.64.19.5
4.24.7

Note: ANSI uses touch-type faucets for sinks only.

(iii) Clear floor space permitting front approach shall comply with §1190.40, Human Data. Clear floor space and knee space shall overlap 1'-7" (485 mm) max. (fig. 15.15).

(iv) Insulate or cover hot water and drain lines. Allow no sharp or abrasive surfaces to remain exposed under accessible lavatories or sinks.

(v) Acceptable faucet control designs include level-operated, push type, touch-type, and electronically controlled mechanisms that comply with §1190.170, Controls and operating mechanisms.

(A) Exception. Self-closing valves are permitted at lavatories if the faucet remains open for at least 10 seconds.

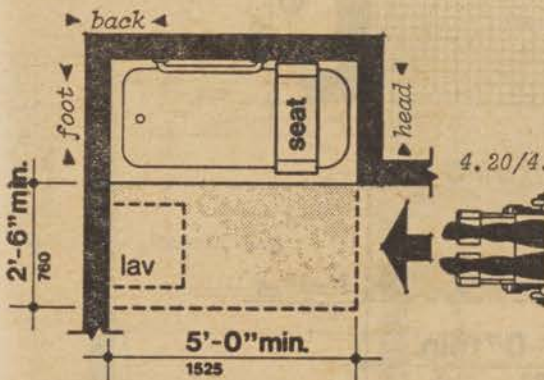
(B) [Reserved]

4.19.6 (5) Mirrors. Mount mirrors with the bottom edge of reflecting surface no higher than 3'-4" (1,015 mm) above finish floor (fig. 15.13).

4.22.7 (6) Controls, dispensers, receptacles, or other equipment. Accessible equipment shall comply with §1190.170, Controls and operating mechanisms.

4.20/4.21 (f) **Bathing facilities.** Bathtubs or showers shall:
4.20.2 (1) Have clear access space as shown in figs. 15.16 to 15.20.
4.21.2

Note: The ATBCB does not address medicine cabinets, ANSI 4.23.9.

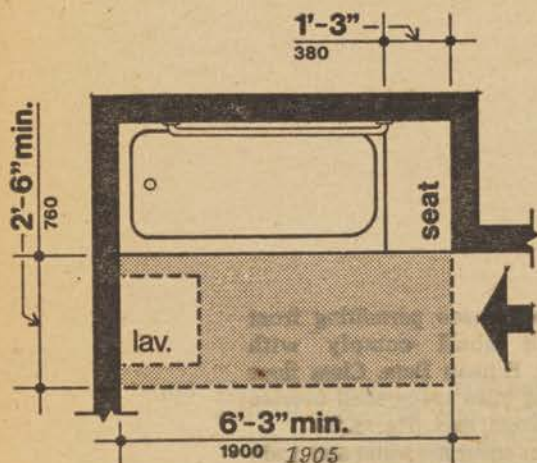


clear floor space

with in-tub seat

ANSI Figure 33(a)

15.
16

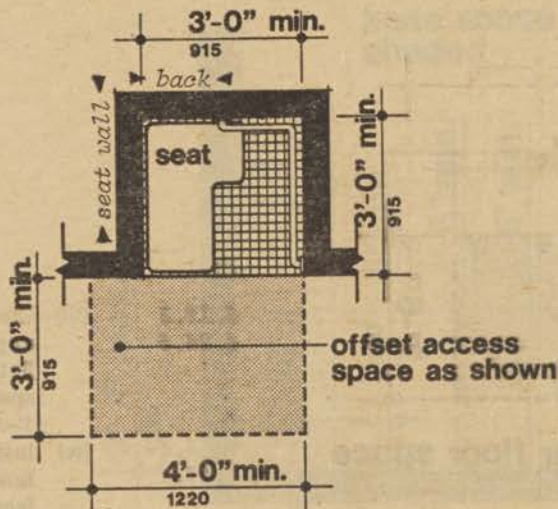


clear floor space

with ledge seat

ANSI Figure 33(b)

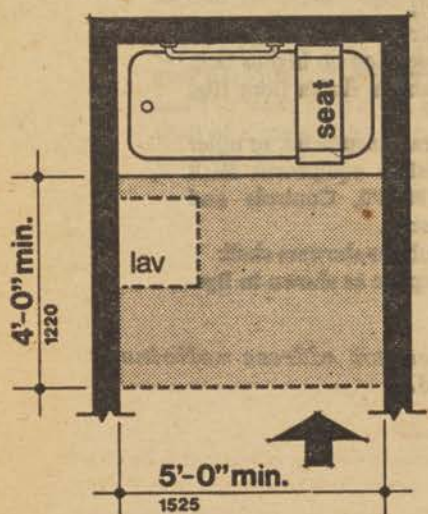
15.
17



transfer stall

ANSI Figure 35

15.
19

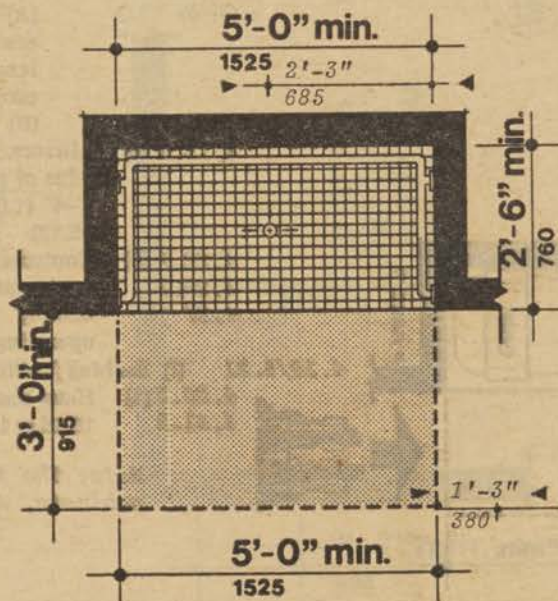


clear floor space

with in-tub seat

ANSI Figure 33(a)

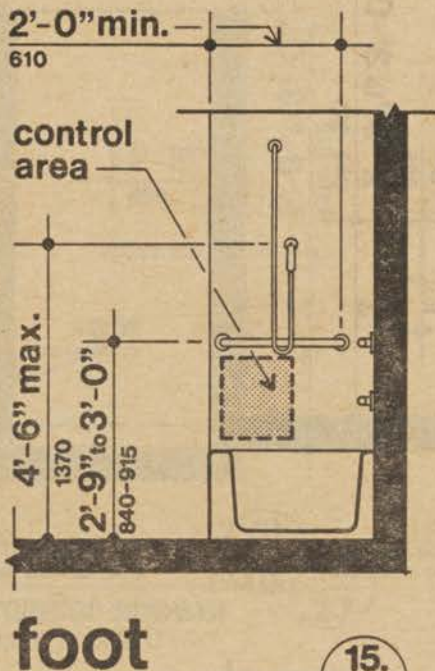
15.
18



roll-in stall

ANSI Figure 35(b)

15.
20



ANSI Figure 34(a)

15.
21

ANSI

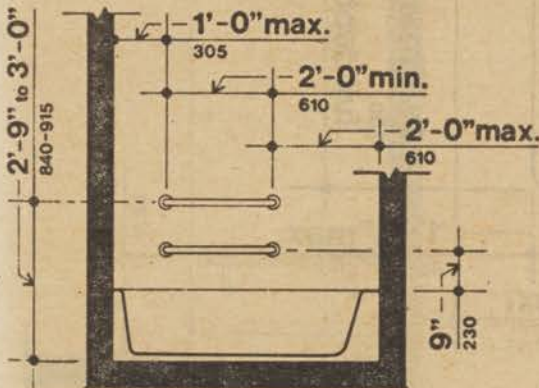
- 4.20.3 (2) ▶ A seat shall be provided in shower stalls 3'-0" x 3'-0" (915 mm x 915 mm) as shown in Figure 15.26. The seat shall be mounted 1'-5" to 1'-7" (430 mm to 485 mm) from the bathroom floor and shall extend the full depth stall. The seat shall be on the wall opposite the controls. ◀

- (2) Have seats provided as shown in figs. 15.16 to 15.19, 15.24 and 15.26 to 15.28.

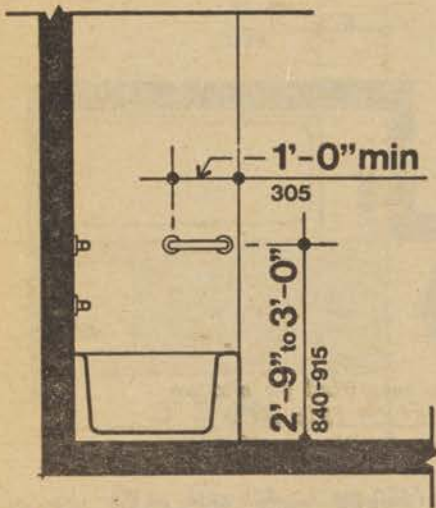
- ▶ (i) ◀ Seats and their attachments shall safely support a 250 lbs. (114 Kg) continuous live load without sustaining permanent deflection. Seats shall not move when mounted during use. In-tub sets shall be portable.
- 4.26.3 ▶ (ii) Shear stress induced in a seat by the application of 250 lbf shall be less than the allowable shear stress for the material of the seat. If its mounting bracket or other support is considered to be fully restrained, then direct and torsional shear stresses shall be totaled for the combined shear stress, which shall not exceed the allowable shear stress.

- (iii) Shear force induced in a fastener or mounting device from the application of 250 lbf shall be less than the allowable lateral load of either the fastener or mounting device or the supporting structure, whichever is the smaller allowable load.

- (iv) Tensile force induced in a fastener by a direct force of 250 lbf plus the maximum moment from the application of 250 lbf shall be less than the allowable withdrawal load between the fastener and the supporting structure. ◀

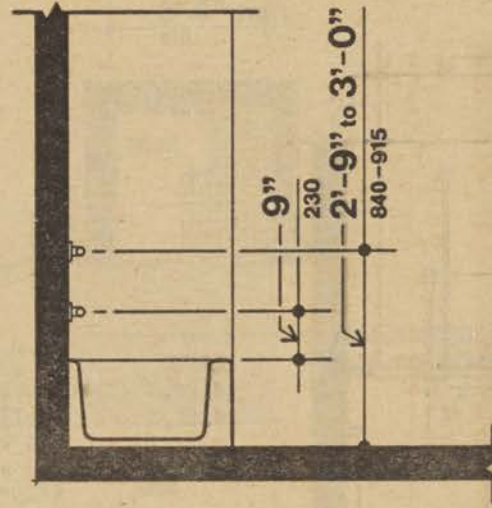
bathtub back
with in-tub seat15.
22

ANSI Figure 34(a)



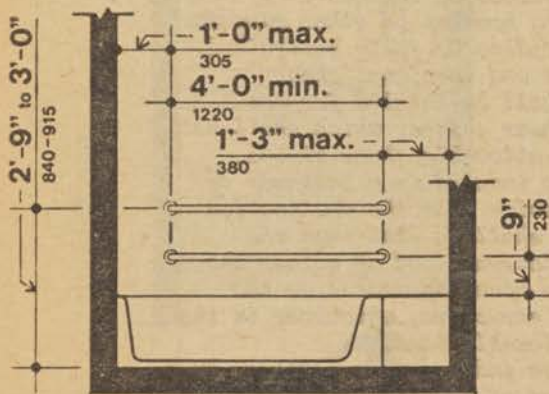
head
with in-tub seat
ANSI Figure 34(a)

15.
23



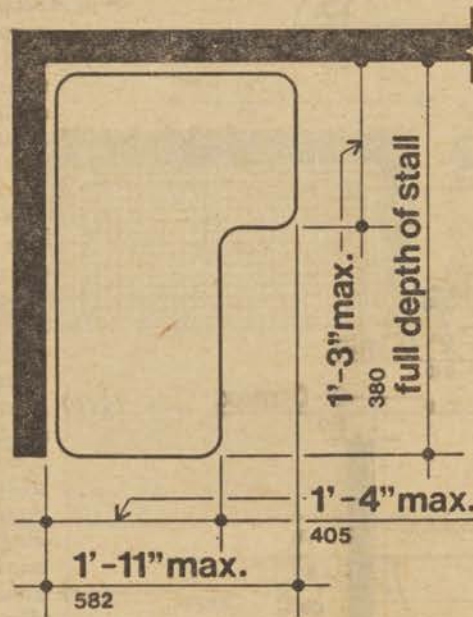
head
with ledge seat
ANSI Figure 34(b)

15.
25



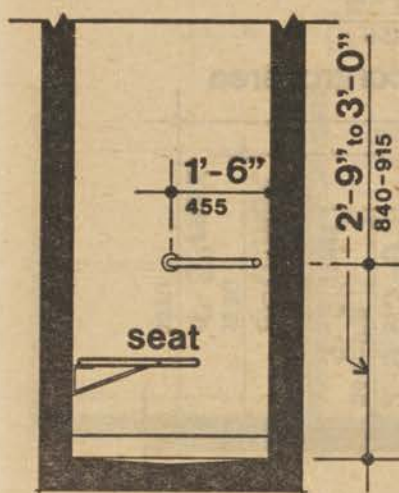
bathtub back
with ledge seat
ANSI Figure 34(b)

15.
24



seat
transfer shower
ANSI Figure 36

15.
26



back

transfer shower

ANSI Figure 37(a)

15.
27

ANSI

4.20.4 (3)

4.21.4

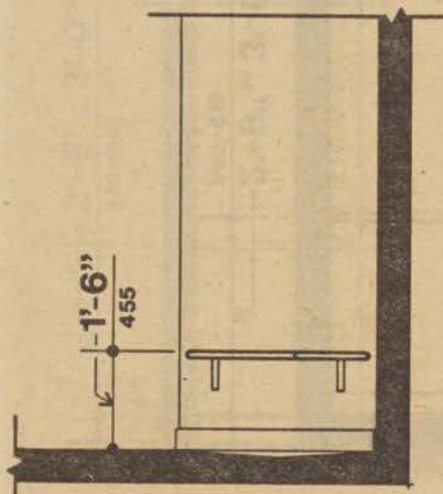
4.20.5

4.21.5

Have grab bars mounted of the length and positioning shown in figs. 15.16 to 15.32.

(4) Have faucets and controls complying with §1190.170, Controls and Operating Mechanisms, located as shown in figs.

15.21, 15.29, and 15.31. ▶ In shower stalls 3'-0" x 3'-0" (915 mm x 915 mm), all controls, faucets, and the shower unit shall be mounted on the side wall opposite the seat. ◀

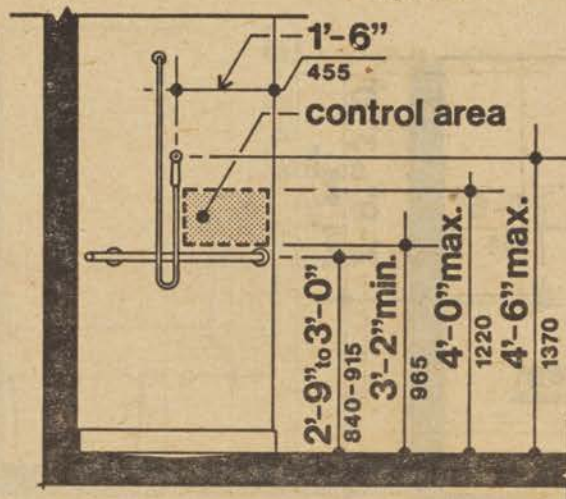


seat wall

transfer shower

ANSI Figure 37(a)

15.
28



control wall
transfer shower

ANSI Figure 37(a)

15.
29

ANSI

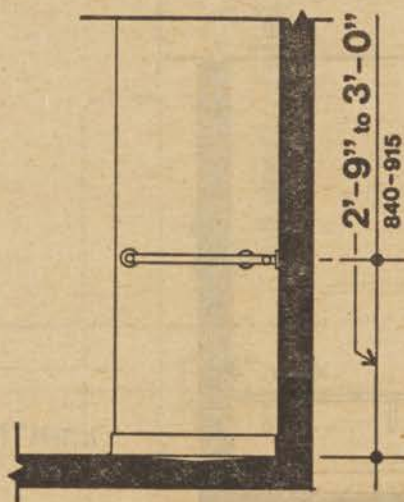
4.20.6

4.21.6

- (5) Have a shower spray unit with a flexible hose a min. of 5'-0" (1,525 mm) long that is usable as a fixed shower head and as a hand-held shower.

(i) Exception. In unmonitored facilities where vandalism is a concern, a fixed shower head mounted at 4'-0" (1,220 mm) above the tub bottom may be used in lieu of the hand-held unit.

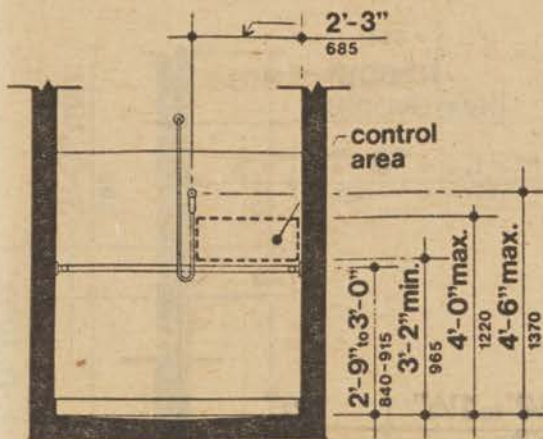
(ii) [Reserved]



side
roll-in shower

ANSI Figure 37(b)

15.
30



control wall

roll-in shower

ANSI Figure 3(b)

15.
31

ANSI

4.20.7 (6)

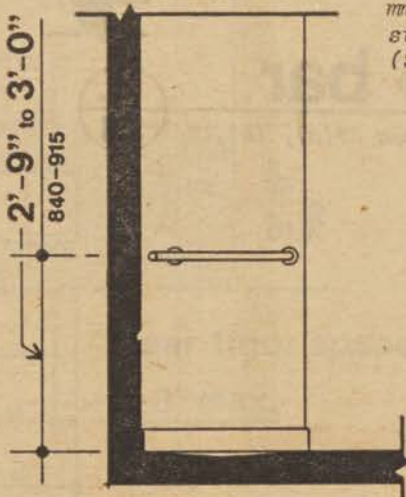
4.21.7

Have enclosures, if provided, that do not obstruct transfer from wheelchairs onto seats or into tubs or access to controls from clear floor spaces. Bathtub enclosures shall not have tracks mounted on the bathtub rims.

4.21.7 (7)

Have shower curbs or thresholds no higher than 1/2 in. (13 mm) beveled.

Note: ANSI permits 4 inch (100 mm) curbs in shower stalls 3'-0" x 3'-0" (915 x 915 mm).



side

roll-in shower

ANSI Figure 3(b)

15.
32

ANSI

4.26

4.26.2

(g) Grab bars. Grab bars for accessible toilet and bathing fixtures shall:

- (1) Have a diameter or width of the gripping surfaces that is 1-1/4 in. to 1-1/2 in. (32 mm to 38 mm).
- (2) Have a 1-1/2 in. (38 mm) (max./min.) clear space between the bar and the mounting surface (fig. 15.33).
- (3) As installed, support a min. concentrated load of 250 lb. (114 Kg).]

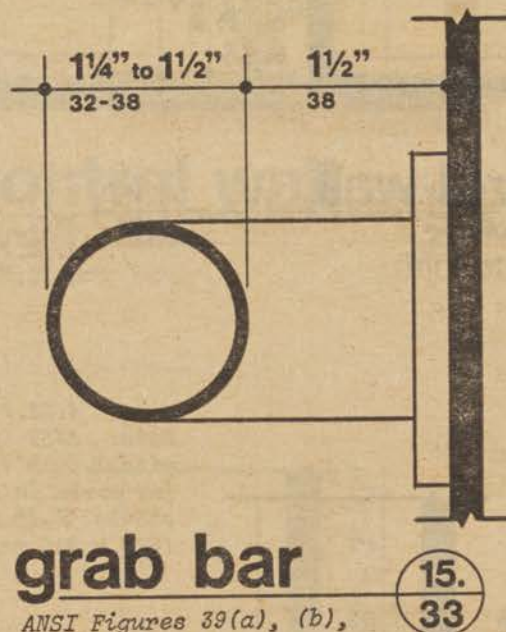
4.26.3(5) (i) *Bending stress in a grab bar induced by the maximum bending moment from the application of 250 lbf shall be less than the allowable stress for the material of the grab bar.*

(ii) *Shear stress induced in a grab bar by the application of 250 lbf shall be less than the allowable shear stress for the material of the grab bar. If the connection between the grab bar and its mounting bracket or other support is considered to be fully restrained then direct and torsional shear stresses shall be totaled for the combined shear stress, which shall not exceed the allowable shear stress.*

(iii) *Shear force induced in a fastener or mounting device from the application of 250 lbf shall be less than the allowable lateral load of either the fastener or mounting device or the supporting structure, whichever is the smaller allowable load.*

(iv) *Tensile force induced in a fastener by a direct tension force of 250 lbf plus the maximum moment from the application of 250 lbf shall be less than the allowable withdrawal load between the fastener and the supporting structure. ◀*

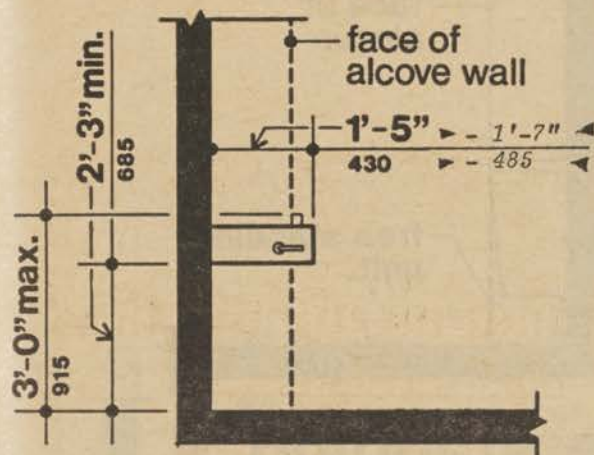
(4) Not rotate in their fittings.



grab bar

ANSI Figures 39(a), (b), and (c)

15.
33



cantilevered drinking fountain

16.
1

ANSI Figure 27(a)

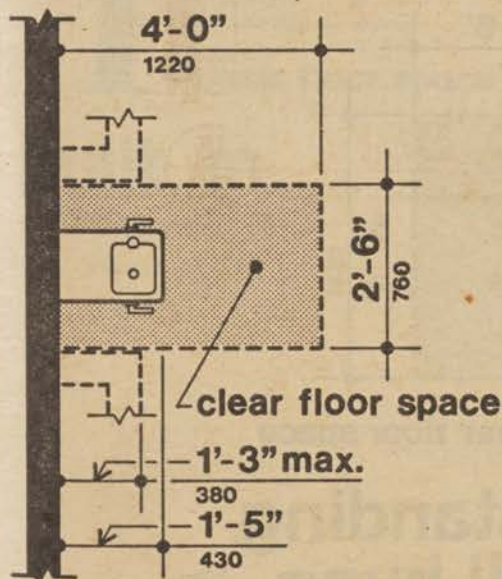
§1190.160 Drinking fountains and water coolers.

(a) **General.** Drinking fountains and coolers required by Subpart C—Scope shall comply with this section.

4.15.5 (b) **Clearances.** Drinking fountains and water coolers shall have clear floor or ground spaces that comply with §1190.40, Human data, and shall be:

- 4.15.5 * (1) Cantilevered units with a clear space allowing a forward approach and having a knee space under the unit that is at least 2'-3" (685 mm) high, 2'-6" (760 mm) wide, and 1'-5" (430 mm) deep (figs. 16.1 and 16.2); or 1'-7" (485 mm) deep (figures 16.1 and 16.2); or

* Note: The ATBCB requests comments on the use of the 2'-3" minimum knee clearance required in Figure 16.1 for cantilevered drinking fountains. This dimension is also used for the minimum knee space under lavatories, see ATBCB Figure 15.3.

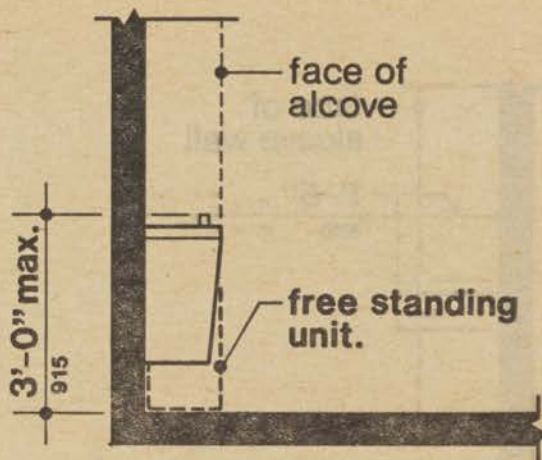


cantilevered drinking fountain

16.
2

ANSI Figure 27(b)

Note: ANSI does not illustrate alcove.



free standing or wall hung

drinking fountain

16.

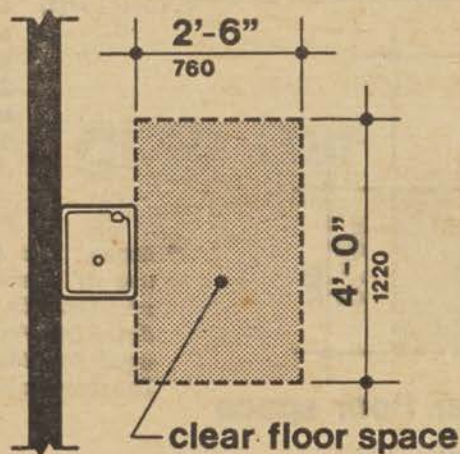
3

No similar figure in ANSI.

ANSI

4.15.5(2) (2)

Free-standing or built-in units with a clear space allowing a parallel approach and not having knee-space (figs. 16.3 and 16.4 and 16.5).



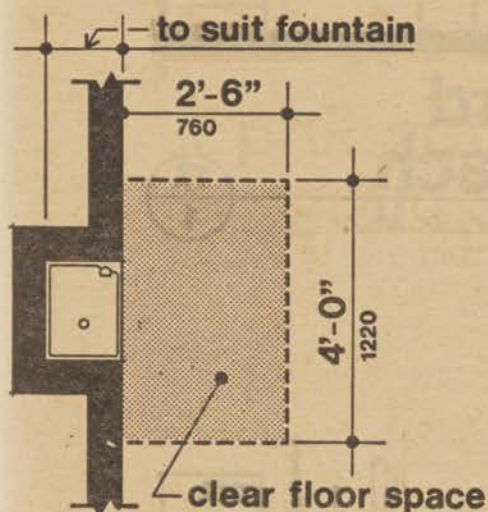
free standing or wall hung

drinking fountain

16.

4

ANSI Figure 27 (c)



ANSI

(c) Spouts of drinking fountains and water coolers. Spouts shall:

- 4.15.2 (1) Be mounted no higher than 3'-0" (915 mm) above the finish floor, measured to the spout outlet.
- 4.15.3 (2) Be at the front of the unit and shall direct water flow trajectory parallel or nearly parallel the front of the unit.
- 4.15.3 (3) Direct water flow at least 4 in. (100 mm) above the unit basin to facilitate cup or glass insertion.
- 4.15.4 (d) Controls. Unit controls shall be front mounted or side mounted near the front edge and shall comply with §1190.170, Controls and operating mechanisms.

built in
drinking fountain

16.
5

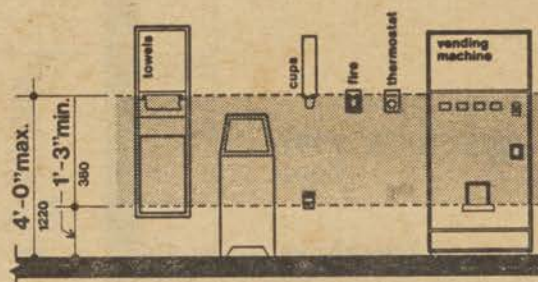
ANSI Figure 27(d)

ANSI

4.27 §1190.170 Controls and operating mechanisms.

- (a) **General.** Controls and operating mechanisms required to be accessible by Subpart C—Scope shall comply with this section.
- 4.27.2 (b) **Location requirements.** Controls and operating mechanisms shall adjoin clear floor or ground space complying with §1190.40, Human data.
- 4.27.3 Mount controls and operating mechanisms in compliance with approach direction and reach limitations specified in paragraph 1190.40(c), Clear floor or ground space, and paragraph 1190.40(d), Reach limitations (figs. 17.1 and 17.2).
- 4.27.4 (c) **Operation.** Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbs. of force (2.2 Kg).
- 4.27.3 (d) **Specialized equipment.** If specialized mechanical, electrical, or process equipment has inherent functional requirements which dictate location or force requirements other than those specified in this section, locate the equipment as dictated by its functional requirements.

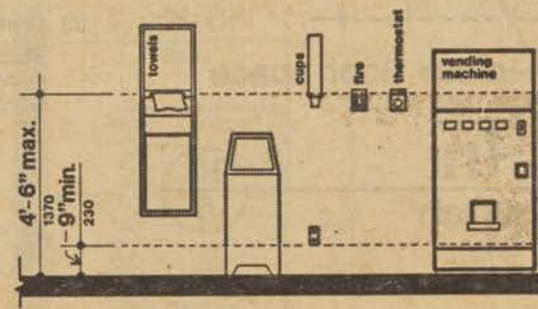
Note: ANSI requires that except where special equipment dictates otherwise, electrical and communications system receptacles on walls shall be mounted no less than 1'-3" (380 mm) a.f.f. See 4.27.3



forward approach

No similar figure in ANSI.

17.
1



parallel approach

No similar figure in ANSI.

17.
2

ANSI
4.28**§1190.180 Alarms**

- (a) **General.** Alarm systems required to be accessible by Subpart C—Scope shall comply with this section.
- 4.28.2 (b) **Audible alarms.** Audible alarms shall produce a sound pressure level that exceeds ambient room or space noise by 15 decibels or any max. noise level of 30 seconds duration by 5 decibels, whichever is greater. ▶ *Sound levels for alarm signals shall not exceed 120 decibels.* ◀
- 4.28.3 (c) **Visual and other sensory alarms.** If audible alarms are provided, then in addition, provide a visual alarm device adjacent to or within each exit sign which flashes in conjunction with audible alarms and operates from the same power source. Flash frequency of visual alarms shall be less than 5 Hz. ▶ *If such alarms use electricity from the building as a power source, then they shall be installed on the same system as the audible emergency alarms.* ◀
- (1) **Exception.** Specialized systems utilizing advanced technology will be considered on a case-by-case basis. ▶ *Specialized utilizing advanced technology may be substituted if equivalent protection is afforded handicapped users of the building or facility.* ◀
- (2) [Reserved]
- no sim- (d) **Pull Stations.** Alarm pull stations shall comply with §1190.170, Controls and operating mechanisms.
ilar pro-
vision
in ANSI

§1190.190 Tactile Warnings. [Reserved]

NOTE: For information on tactile warnings, see ANSI A117.1 (1980), Section 4.29.

Note: ANSI 4.29 Tactile Warnings has been deleted from the ATBCB Minimum Guidelines and Requirements until such time as sufficient research and/or field experience dictate a requirement in this area.

ANSI

4.30 §1190.200 Signage.

- (a) **General.** Information and identification of elements and spaces as required by Subpart C—Scope shall comply with this section.

(1) **Exception.** The provisions of paragraph 1190.200(c) are not mandatory for temporary information on room and space signage.

(2) [Reserved]

4.30.2 (b) **Character proportion and contrast.** Letters and numbers on sign systems shall:

(1) Have a width-to-height ratio of between 3:5 and 1:1.

(2) Have a stroke width-to-height ratio of between 1:5 and 1:10.

4.30.3 (3) **Contrast in value with their backgrounds,** preferably light letters on a dark background.

4.30.4 (4) **Have a matte finish on a matte finish background.**

Note: (c) **Raised or incised characters.** Provide numbers and letters that are:

(1) Raised or incised from the background surface 1/32 in. (0.8 mm). Also incise or raise symbols and pictographs in this manner.

(2) Between 5/8 in. (16 mm) and 2 in. (50 mm) high.

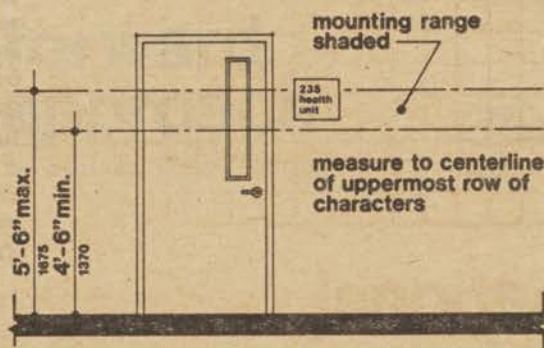
(3) Sans serif with sharply defined edges.

(4) If incised, provided with at least a 1/4 in. (6 mm) stroke width.

no similar provision in ANSI. (d) **Mounting location and height.** Signage shall be placed in a standardized location throughout a building or facility as follows:

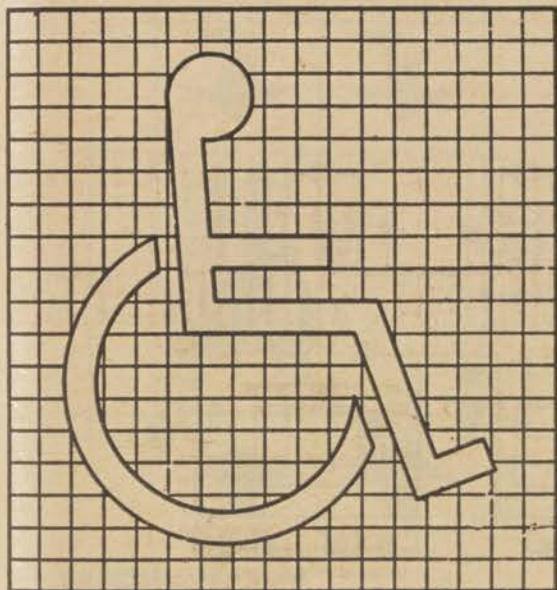
(1) Interior signage shall be located alongside of the door on the latch side and shall be mounted at between 4'-6" and 5'-6" (1,370 mm and 1,675 mm) above finish floor (fig. 20.1)

(2) Exterior signage shall be installed at entrances and walks to direct individuals to accessible routes and entrances as required.



location & height 20.1

No similar figure in ANSI.



international symbol

ANSI Figure 42(a)

20.
2

ANSI

- (e) **Symbol of accessibility.** Identification of accessible facilities as required by Subpart C—Scope shall be by means of the International Symbol of Accessibility. Display as shown in figs. 20.2 and 20.3. Provide symbols of the following min. dimensions:

4.30.5

No similar chart in ANSI.	Size	Location	Viewing Distance
	2-1/2 in. (65 mm)	Interior	Up to 30 ft. (9 m)
	4 in. (100 mm)	Interior	Greater than 30 ft. (9 m)
	4 in. (100 mm)	Exterior	Up to 60 ft. (18 m)
	8 in. (200 mm)	Exterior	Greater than 60 ft. (18 m)

§1190.210 Telephones.

See ATBCB Minimum Guidelines and Requirements for Accessible Design, Amendment to Final Rule, published elsewhere in this Federal Register.



display conditions

ANSI Figure 43(b)

20.
3

4.32 §1190.220 Seating, tables, and work surfaces.

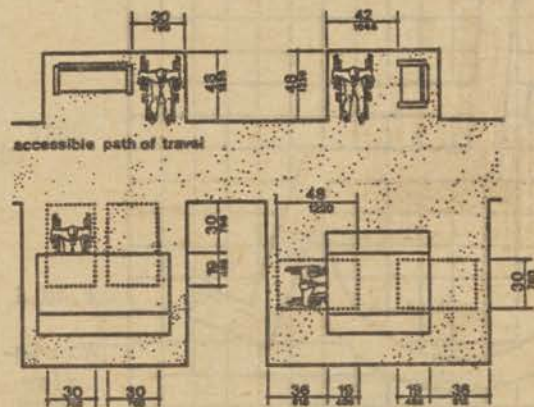
(a) **General.** Fixed seating spaces, tables, or work surfaces required to be accessible by Subpart C—Scope shall comply with this section.

4.32.2 (b) **Clearances.** Seating spaces for people in wheelchairs at tables, counters, or work surfaces shall:

(1) Have a clear floor or ground spaces that comply with §1190.40, Human data.

4.32.3 (2) Have knee spaces that are at least 2'-3" (685 mm) high, 2'-6" (760 mm) wide, and 1'-7" (485 mm) deep. Clear access space and knee space may overlap 1'-7" (fig. 15.15).

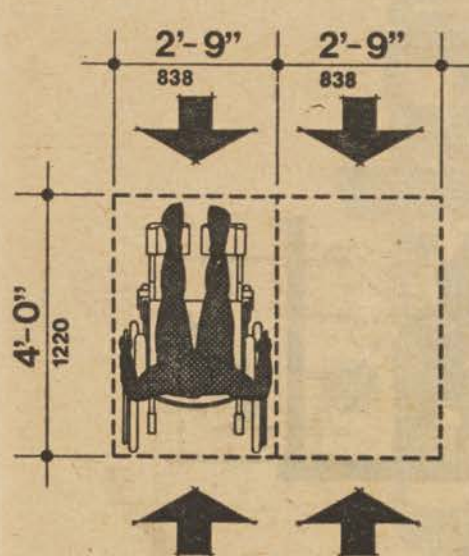
4.32.4 (3) Have table tops or work surfaces mounted between 2'-4" to 2'-10" (710 mm to 865 mm) above finish floor.



minimum clearances seating and tables

ANSI Figure 45





viewing positions

ANSI Figure 46(a)

23.
1ANSI
4.33

§1190.230 Assembly areas, Conference, and Meeting Rooms.

(a) **General.** Assembly areas required to be accessible by Subpart C—Scope shall comply with this section.

4.33.2 (b) **Size and location of viewing positions:** Accessible viewing positions shall:

- (1) Provide min. level clear floor or ground areas as shown in figs. 23.1 and 23.2.
- (2) Accommodate one occupied wheelchair or one portable seat to accommodate persons with crutches or leg braces.
- (3) Be in an adjoining configuration if only two positions are provided. Additional positions may be in single position configurations.
- (4) Be an integral part of the seating plan and shall be dispersed throughout the assembly area providing sight lines comparable to those for all seating.

(i) **Exception.** In alteration work where it is structurally impossible to alter seating locations to disperse seating throughout, seating may be located in collected areas as structurally feasible. Seating must adjoin an accessible route that also serves as a means of emergency egress.

(ii) [Reserved]

(5) Adjoin an accessible route of emergency egress as required by paragraph 1190.50(h), Egress.

(6) Have surfaces that comply with paragraph 1190.50(i), Ground and floor surfaces.

4.33.3

4.34.4

4.33.5 (c) **Performing areas.** Provide accessible routes that comply with §1190.50, Walks, floors, and accessible routes, to performing areas, including but not limited to stages, arena floors, dressing rooms, locker rooms, and other rooms and spaces required for use of the assembly area.

4.33.6

4.33.7

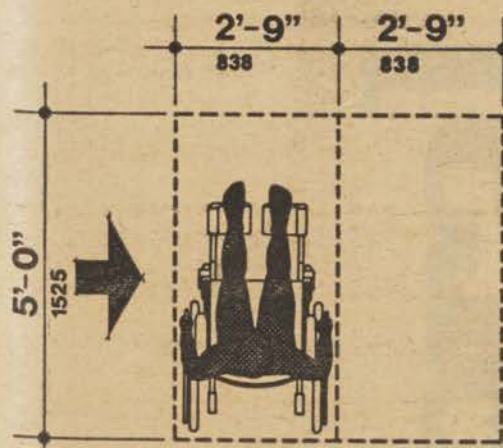
(1) **Exception.** In alteration work where it is structurally impracticable to alter all performing areas to be on an accessible route, at least one of each type shall be made accessible.

(2) [Reserved]

4.33.6 (d) **Listening systems.** Provide [assembly areas with] a listening system to assist no fewer than two persons with severe hearing loss

4.33.7 *

*See questions highlighted for comment at 1190.31(s).



viewing positions

ANSI Figure 46(b)

23.
2

ANSI

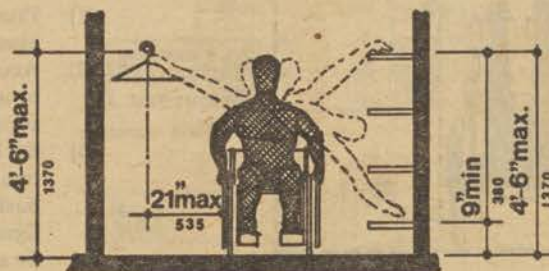
- 4.33.6 (1) If the listening system serves individual seats, locate such seats within 50 ft (15 m) of the stage or arena. Such locations shall provide a complete view of the stage or arena.
- 4.33.7 (2) Acceptable types of listening systems include, but are not limited to, audio loops and radio frequency systems.

4.25 §1190.240 Storage

- (a) **General.** Storage facilities required to be accessible by Subpart C—Scope shall comply with this section.

- 4.25.2 (1) Provide clear floor or ground spaces that comply with §1190.40, Human data.
- 4.25.3 (2) Provide storage spaces and clothes rods that comply with paragraph 1190.40(d), Reach limitations (fig. 24.1)
- 4.25.4 (3) Provide accessible hardware that complies with §1190.170, Controls and operating mechanisms.

- (b) [Reserved]



storage

ANSI Figure 38

24.
1

Subpart E — Special Building or Facility Tapes or Elements. (Reserved)

Preamble A.

Authority: Sec. 502(b)(7) of the Rehabilitation Act of 1973 (29 U.S.C. 792(b)(7), as amended by the Rehabilitation, Comprehensive Services, and Developmental Disabilities Amendments of 1978 (Pub. L. 95-602).