

Chapter 15.04

**INTERNATIONAL BUILDING
CODE ADOPTED**

Sections:

- 15.04.010 International Building Code adoption.**
- 15.04.020 Conflict**
- 15.04.030 Building Official**
- 15.04.040 Amendments**
- 15.04.050 Constitutionality**

15.04.010 International Building Code adoption.

The 2006 Edition of the International Building Code, including Appendix C and Appendix I as published by the International Code Council Inc. and amendments and additions thereto as provided in this chapter are hereby adopted as the Building Code by the city for regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings and structures in the city providing for the issuance of permits and collection of fees therefore. The whole thereof has been adopted except such portions as may be deleted, modified or amended as hereinafter set out or later adopted. The Finance Officer shall keep and maintain a master copy of said code, including all future deletions, modifications and amendments which may be adopted. The minimum building standards in the 2006 edition of the International Building Code and amendments thereto shall be applied to any building permit issued after June 30, 2009.

A printed copy of such code and additions and amendments thereto is on file with the city clerk.

15.04.020 Conflict.

In the event of any conflict between the provisions of the code adopted by this article and applicable provisions of this Code of Ordinances, state law or city ordinance, rule or regulation, the provisions of this Code of Ordinances, state law or city ordinance, rule or regulation shall prevail and be controlling.

15.04.030 Building Official.

The building official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act or omission performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be afforded all the protection provided by any immunities and defenses provided by other applicable state and federal laws.

This code shall not be construed to relieve or lessen the responsibility of any person owning, operating or controlling any building or structure for any damages to persons or property caused by defects, nor shall the city, its officers and employees be held as assuming any such liability by reason of the inspections authorized by this code or any permits or certificates issued under this code.

15.04.040 Amendments.

15.04.041

In the “2006 International Building Code,” Section 3 of Sub-Section 1025 – Emergency Escape and Rescue be amended to read as follows:

1025.3 Maximum height from floor.
Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 48 inches (1220 mm) measured from the floor.
(Amended 2005)

15.04.042

In the “2006 International Building Code,” Section 1.4 of Sub-Section 406 – Separation shall be amended to read as follows:

406.1.4 Separation. Separations shall comply with the following:

1. The private **garage** shall be separated from the dwelling unit and its attic area by means of a minimum of 5/8 – inch (15.9 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8 – inch Type X gypsum board or equivalent. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors, or solid or honeycomb core steel doors not less than 1 3/8 inches (35.9 mm) thick, or doors in compliance with Section 715.3.3. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted.

2. Ducts in a private garage and ducts penetrating the walls or ceilings separating the dwelling unit from the garage shall be constructed of a minimum 0.019 – inch (0.48 mm) sheet steel and shall have no openings into the garage.

3. A separation is not required between a Group R-3 and U carport provided the carport is entirely open on two or more sides and there are not enclosed areas above.
(Amended 2005)

15.04.043 Porches and terraces in front yards.

An open, unenclosed porch may project into a required front yard for a distance not exceeding ten (10) feet. Balconies and paved terraces may project into a required front yard for a distance not exceeding six feet. An enclosed vestibule containing not more than forty (40) square feet may project into a required front yard for a distance not to exceed four (4) feet.
(Amended 2008)

15.04.044 General Construction Requirements

Section R302.1 Exterior Walls - Exception 2 is amended to read: Detached **garages** accessory to a dwelling are not required to provide wall protection when the building area does not exceed 1000 square feet and the exterior wall is located not less than 3 feet from the property line. Roof eave projections shall extend not less than 12 inches to a property line.

Section R310.1 Emergency Escape and Rescue Required – is amended to by adding the following sentence to the section: In basements, the sill height of an emergency escape and rescue opening may be measured from an elevated landing, provided the landing is not less than 36 inches in width and not less than 20 inches out from the exterior wall, and not more than 24 inches in height. The elevated landing and its supporting structure shall be permanently affixed to the wall and floor below the openable emergency escape and rescue window.

Section R404.1 Concrete and Masonry Foundation Walls – Paragraph 2 is amended to read: Floor joists and blocking shall be connected to the sill plate at the top of the wall with three 8d nails toe nailed to the sill or girder.

Paragraph 3 is amended to read: Sills plates shall be bolted to the foundation or foundation wall with not less than ½ inch nominal diameter steel bolts embedded at least 7 inches into the concrete or masonry and spaced not more than 4 feet apart. There shall be a minimum of two bolts per piece with one bolt located within 12 inches of each end of each piece. A properly sized nut and washer shall be tightened on each bolt to the plate.

Paragraph 5 is deleted.

Section 903.4.2 Alarms – is amended to read: Approved audible devices shall be connected to every automatic sprinkler system. Such sprinkler water flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Approved audible visual alarms to alert the occupants of the building shall be installed throughout the building in accordance with NFPA 72 and as required by the authority having jurisdiction. Where a fire alarm system is installed, activation of the automatic sprinkler system shall activate the buildings fire alarm system.

Section R907.3 Re-covering Versus Replacement – Paragraph 4 is deleted.

Table R301.2 (1) Climatic And Geographic Design Criteria – is

amended by inserting the following climate and geographical design criteria. The following Table shall be applicable to the General Design Requirements of the 2006 IRC and 2006 IBC.

Ground Snow Load	Wind Speed (mph)	Seismic Design Category	Weathering (concrete masonry)	Frost Line Depth	Termite Damage
35	90	A	Severe	42 inches	Slight
Decay Damage	Winter Design Temp	Ice Shield Required	Flood Hazard NFIP Adopted	Air Freezing Index	Mean Annual Temperature
Slight	- 7 F	Yes	1979	2000	48.3 F

Table R403.1 Minimum Width of Concrete or Masonry Footings – all tables shall be replaced with the following:

Spread Footings – Single Story Light Frame Construction Only

Number of Floors Supported By Foundation	Width of Footings (inches)	Thickness of Footings (inches)	Minimum Depth of Foundation Below Natural Surface of Ground or Finish Grade (inches)
1	16	8	42
2	16	8	42
3	20	12	42

- Notes:
- a) Foundations may support a roof in addition to the stipulated number of floors.
 - b) Foundations supporting only roofs shall be as required for supporting one floor.
 - c) The ground under the floor is permitted to be excavated to the footings top elevation.
 - d) All footings shall have at least two (2) #4 reinforcement bars parallel with footings.

Trench Footings – Single Story Light Frame Construction Only

Number of Floors Supported By Foundation	Minimum Width of Footings (inches)	Minimum Depth of Foundation Below Natural Surface of Ground or Finish Grade (inches)	Minimum Vertical Reinforcement	Minimum Horizontal Reinforcement
1	8	42	#4 at 48" o.c.	#4 top and bottom

- Notes:
- a) Foundations may support a roof in addition to the stipulated number of floors.
 - b) Soil bearing pressure shall be a minimum of 2000 psi.
 - c) Structural spans shall not exceed 16 feet.

Table 1805.4.2 Floors supporting walls of Light Frame Construction – is amended by adding the following table.

Monolithic Slab Footings – Group U (Utility) Type Structures Only

Maximum Building Area	Minimum Width of Footings (inches)	Minimum Depth of Footing (inches)	Minimum Horizontal Reinforcement	Minimum Floor Thickness (inches)
1000 Sq. Ft.	12	12	#4 top and bottom	3.5

Note:

- a) Footings or foundation shall extend a minimum 6 inches above the finished grade.
- b) Footings shall support not more than 16 inches of masonry block or concrete.
- c) Monolithic Slab Footings are not permitted when any portion of the footing is to be located less than six feet to a Group R - Residential Occupancy Use.

15.04.050 Constitutionality.

If any section, provision or part of this ordinance shall be adjudged invalid or unconstitutional such adjudication shall not affect the validity of the ordinance as a whole or any section, provisions or part thereof not adjudged invalid or unconstitutional.

(Ord. 386 § 308, 2002) (Amended)

Chapter 15.24

INTERNATIONAL RESIDENTIAL CODE

Sections:

- 15.24.010 Adoption**
- 15.24.020 Conflict**
- 15.24.030 Building Official**
- 15.24.040 Amendments**
- 15.24.050 Constitutionality.**

Section 15.24.010 Adoption

The International Residential Code, 2006 edition—including Appendix E, Appendix G, and Appendix H—as published by the International Code Council Inc. as amended is hereby adopted as the residential building code by the city for regulating the design, construction, quality of materials, erection, installation, alteration, movement, repair, equipment, use and occupancy, location, removal, and demolition of detached one- and two-family dwellings and townhouses not more than three stories in height with a separate means of egress and their accessory structures, and provides for the issuance of permits and collection of fees therefore. The whole thereof has been adopted except such portions as may be deleted, modified or amended as hereinafter set out or later adopted. The Finance Officer shall keep and maintain a master copy of said code, including all future deletions, modifications and amendments which may be adopted. The minimum building standards in the 2006 edition of the International Residential Code and amendments thereto shall be applied to any building permit issued after June 30, 2009.

The code shall be filed with the city clerk.

15.24.020 Conflict.

In the event of any conflict between the provisions of the code adopted by this article and applicable provisions of this Code of Ordinances, state law or city ordinance, rule or regulation, the provisions of this Code of Ordinances, state law or city ordinance, rule or regulation shall prevail and be controlling.

15.24.030 Building Official.

The building official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act or omission performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be afforded all the protection provided by any immunities and defenses provided by other applicable state and federal laws.

This code shall not be construed to relieve or lessen the responsibility of any person owning, operating or controlling any building or structure for any damages to persons or property caused by defects, nor shall the city, its officers and employees be held as assuming any such liability by reason of the inspections authorized by this code or any permits or certificates issued under this code.

15.24.040 Amendments.

15.24.041

In the “2006 International Residential Code,” Section 2 of Sub-Section R309.2 Separation required be amended to read as follows:

R309.2 Separation required. The garage shall be separated from the residence and its attic area by not less than 5/8 – inch (15.9mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8 – inch (15.9mm) Type X gypsum board or equivalent. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than 5/8 – inch (15.9 mm) gypsum board or equivalent.
(Amended 2005)

15.24.042

In the “2006 International Residential Code,” Section 1 of Sub-Section R310 – Emergency Escape and Rescue Openings be amended to read as follows:

R310.1 Emergency escape and rescue required. Basements with habitable space and every sleeping room shall have at least one openable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 48 inches (1220 mm) above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section 310.3. The net clear opening dimensions required by this section shall be obtained by the normal

operation of the emergency escape and rescue opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2 (Amended 2005)

15.24.050 Constitutionality.

If any section, provision or part of this ordinance shall be adjudged invalid or unconstitutional such adjudication shall not affect the validity of the ordinance as a whole or any section, provisions or part thereof not adjudged invalid or unconstitutional.

(Ord. 386 § 308, 2002) (Amended)

Chapter 17.24

SINGLE--FAMILY RESIDENTIAL DISTRICT (R-1)

Sections:

- 17.24.010** **Generally.**
- 17.24.020** **Uses permitted.**
- 17.24.030** **Accessory uses.**
- 17.24.040** **Building height limit.**
- 17.24.050** **Minimum lot area.**
- 17.24.060** **Minimum lot width.**
- 17.24.070** **Minimum front yard depth.**
- 17.24.080** **Minimum side yard width.**
- 17.24.090** **Minimum rear yard depth.**
- 17.24.100** **Exceptions.**

17.24.010 **Generally.**

In R-1 districts, the following regulations shall apply, except as otherwise approved herein. (Ord. 386 § 710, 2002)

17.24.020 **Uses permitted.**

- A. Single-family detached dwelling;
- B. Churches and accessory buildings;
- C. Museums, libraries, parks, playgrounds or community centers;
- D. Private swimming pools when enclosed with a nonclimbable fence at least four feet in height;
- E. Hospitals and clinics (not animal);
- F. Nursery schools and child care centers;

G. See Sections 17.68.100 through 17.68.130. (Ord. 386 § 711, 2002)

17.24.030 **Accessory uses.**

A. Customary home occupations; provided, that such occupations shall be conducted solely by resident occupants in their place of abode and provided that not more than one-half the area of one floor shall be used for such purpose; provided

further, that such occupations shall not require external or internal alterations or the use of mechanical equipment not customary in dwellings;

B. The parking of an unoccupied travel trailer, camping trailer, pick-up topper or pick-up camper, shall be permitted in the rear or side yard only;

C. The storage of one pleasure boat shall be permitted within a building, or in the open within the rear yard;

D. Secondary structures/**garages/utility sheds** should be two feet from the farthest protrusion/overhang/eave trough from side lot line; ten (10) feet without any vehicle access or twenty (20) feet with vehicle access off rear lot line. (Ord. 386 § 712, 2002)

17.24.040 **Building height limit.**

Two and one-half stories, but not exceeding thirty-five (35) feet in height and no accessory structure shall exceed one story or fifteen (15) feet in height. (Ord. 386 § 713, 2002)

17.24.050 **Minimum lot area.**

Six thousand five hundred (6,500) square feet for each dwelling together with its accessory buildings; however, where public sewer and water facilities are not available, not less than twenty thousand (20,000) square feet. If public water only is available, not less than ten thousand (10,000) square feet. (Ord. 386 § 714, 2002)

17.24.060 **Minimum lot width.**

Fifty (50) feet.
(Ord. 386 § 715, 2002)

17.24.070 **Minimum front yard depth.**

Thirty (30) feet.
(Ord. 386 § 716, 2002)

17.24.080 Minimum side yard width.

(Each side) seven feet for a dwelling and seven feet for any other building. (Ord. 386 § 717, 2002)

17.24.090 Minimum rear yard depth.

Twenty-five (25) feet for a dwelling. (Ord. 386 § 718, 2002)

17.24.100 Exceptions.

See Sections 17.68.100 through 17.68.130. (Ord. 386 § 719, 2002)

Chapter 17.32

MULTIPLE FAMILY DISTRICT (R-3)

Sections:

- 17.32.010** **Generally.**
17.32.020 **Uses permitted.**
17.32.030 **Accessory uses.**
17.32.040 **Building height limit.**
17.32.050 **Minimum lot area.**
17.32.060 **Minimum lot width.**
17.32.070 **Minimum front yard
depth.**
17.32.080 **Minimum side yards.**
17.32.090 **Minimum rear yard
depth.**
17.32.100 **Lots not served by sewer
and water.**
17.32.110 **Exceptions.**

17.32.010 **Generally.**

In R-3 districts the following regulations apply, except as otherwise provided herein. (Ord. 386 § 730, 2002)

17.32.020 **Uses permitted.**

- A. Uses permitted in R-2 districts;
B. Multiple dwellings including row housing and condominiums;
C. Private clubs, lodges, or veterans organizations, excepting those holding a beer permit or liquor license;
D. Boarding and lodging houses;
E. Funeral homes;
F. Office of a dentist or physician;
G. Hospitals, clinics, nursing and convalescent homes, excepting animal hospitals and clinics;
H. Institutions of religious, education or philanthropic nature;
I. See Sections 17.68.100 through 17.68.130 for special uses. (Ord. 386 § 731, 2002)

17.32.030 **Accessory uses.**

- A. Accessory uses permitted in the R-2 district;
B. Storage **garages**, where the lot is occupied by multiple dwelling, hospital or institutional building;
C. Beauty parlor and barber shop when conducted as a home occupation solely by resident occupants in their place of abode and provided that not more than one quarter of the area of one floor shall be used for such purpose. An indirectly lighted sign of not over one square foot in area and attached flat against the building shall be permitted. (Ord. 386 § 732, 2002)

17.32.040 **Building height limit.**

Principal building: forty-five (45) feet; except that for each one foot that the building or a portion of it sets back beyond the required front, side, and rear yards, one foot may be added to the height limit of such building or portion thereof. Accessory building: twelve (12) feet. (Ord. 386 § 733, 2002)

17.32.050 **Minimum lot area.**

- A. Single-family dwelling: seven thousand five hundred (7,500) square feet.
B. Two-family dwelling: seven thousand five hundred (7,500) square feet.
C. Multifamily dwelling: nine thousand five hundred (9,500) square feet plus an additional two thousand (2,000) square feet for each unit over three. (Ord. 386 § 734, 2002)

17.32.060 **Minimum lot width.**

- A. Single-family dwelling: fifty (50) feet.
B. Two-family dwelling: fifty (50) feet.
C. Multifamily dwelling: seventy-five (75) feet. (Ord. 386 § 735, 2002)

17.32.070 Minimum front yard depth.

Thirty (30) feet. Front yards shall be measured from street right-of-way line. (Ord. 386 § 736, 2002)

17.32.080 Minimum side yards.

- A. One and one half stories: side yard: seven feet; minimum on one side: seven feet.
- B. Two and two and one half stories: side yard: seven feet; minimum on one side: seven feet.
- C. Three stories or more up to forty-five (45) feet: total side yard: twenty-five (25) feet; minimum on one side: ten (10) feet.
- D. Structures above forty-five (45) feet: see height regulations above. (Ord. 386 § 737, 2002)

17.32.090 Minimum rear yard depth.

Twenty-five (25) feet. (Ord. 386 § 738, 2002)

17.32.100 Lots not served by sewer and water.

- A. Single-family and two-family dwelling: where neither public sewer nor public water is available, twenty-thousand (20,000) square feet lot area and one hundred (100) feet lot width. Where public water only is available, ten thousand (10,000) square feet lot area and eighty (80) feet lot width.
- B. Multifamily dwelling: where public sewer is not available, special consideration shall be given to determine lot area and width requirements. (Ord. 386 § 739, 2002)

17.32.110 Exceptions.

See Sections 17.68.100 through 17.68.130. (Ord. 386 § 739.1, 2002)

Chapter 17.36

MOBILE/MANUFACTURED
HOME PARK DISTRICT (R-4)

Sections:

- 17.36.010 Purpose and intent.
- 17.36.020 Definitions.
- 17.36.030 Principal permitted uses.
- 17.36.040 Permitted accessory uses.
- 17.36.050 Bulk regulations.
- 17.36.060 Duty of licensee and occupants.
- 17.36.070 Required term, renewal and fee.
- 17.36.080 Revocation or refusal.
- 17.36.090 Transfer.
- 17.36.100 Manufactured home placement permit.
- 17.36.110 Detached accessory buildings and structures.
- 17.36.120 Service buildings and equipment.
- 17.36.130 Carports, cabanas, enclosed vestibules, canopies and decks.
- 17.36.140 Inspections.
- 17.36.150 Plan required--Placement of manufactured homes.
- 17.36.160 Water supply/water meters.
- 17.36.170 Waste disposal.
- 17.36.180 Garbage disposal.
- 17.36.190 Electricity.
- 17.36.200 Fire protection.
- 17.36.210 Park identification sign and office.
- 17.36.220 Street and space numbering.
- 17.36.230 General housing requirements.
- 17.36.240 Minimum space, use and location requirements.
- 17.36.250 Basic equipment and facilities.

- 17.36.260 Light, ventilation and heating.
- 17.36.270 Notices and orders.
- 17.36.280 Notice to vacate.
- 17.36.290 Appeals.
- 17.36.300 Judicial review.

17.36.010 Purpose and intent.

The purpose and intent of the residential district R-4 and the terms and conditions of this title is to promote the health, safety and welfare of the inhabitants of the city through the regulation of the location, planning, design, layout, construction, and operation of this licensed manufactured home park and manufactured homes placement and use therein, which by reason of their design and location will be compatible with nearby zoning districts. (Ord. 386 § 740, 2002)

17.36.020 Definitions.

The following words, terms and phrases, when used herein, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

"**Administration**" means the North Sioux City finance officer.

"**Cabana**" means a factory-built room enclosure erected or constructed and attached to a manufactured home for residential use by the occupants of a manufactured home.

"**Codes**" means any codes or other regulations that the city council or its departments have adopted which include, but are not limited to, the fire code, health code, building code, plumbing code, heating code and electrical code. Such codes will be controlling when work is to be done in a given area where such code is applicable.

"**Detached accessory building**" means an incidental freestanding building located on the same lot that it serves and

used solely for storage of personal equipment and possessions of the manufactured home occupants.

"License" means a licensed manufactured home park operator's license.

"Licensee" means the person to whom a manufactured home park license has been granted.

"Licensing entity" means the city common council.

"Manufactured home" means a dwelling unit that is fabricated in one or more sections at a location other than the home site by assembly line-type production techniques or by other construction methods unique to an off-site manufacturing process. A manufactured home is designed to be towed on its own chassis or be site delivered by alternative means. Every section shall bear a label certifying that it is built in compliance with the Federal Manufactured Home Construction and Safety Standards. For manufactured homes built prior to June 15, 1976, a label certifying compliance to the Standard for Manufactured Homes, NEFA 501, ANSI 119.1, in effect at the time of manufacture is required.

Manufactured Home Park, Licensed. "Licensed manufactured home park" means a contiguous parcel of land, under the same ownership, where lots are rented for the temporary placement of manufactured homes, with all necessary facilities and services, and is licensed by the city.

"Manufactured home space" means a parcel of land designated and approved for the placement of a single manufactured home. Manufactured home park shall not include travel trailer parks or trailer sales lots.

"Park occupant" means a person living in a manufactured home located on a licensed manufactured home park.

"Park operator" means the person to whom a manufactured home park license

has been issued or who is managing the licensed manufactured home park for someone who has been issued a license.

"Planning commission" means the North Sioux City planning commission.

"Required yard" means a yard of a manufactured home as set out in a licensed manufactured home park layout plan.

"Service building" means an accessory building to a licensed manufactured home park for related services.

"Service equipment" means the plumbing, mechanical and electrical equipment including piping, wiring, fixtures and accessories which provide sanitation, lighting, heating, ventilation, cooling, refrigeration, fire protection, and facilities essential for the habitable occupancy of a manufactured home or accessory building or structure for its designated use and occupancy.

"Utilities" means water and sewer, gas or electrical distribution system that is available for connection to manufactured homes in a licensed manufactured home park.

"Zoning ordinance" means the revised zoning ordinances of the city of North Sioux City. (Ord. 386 § 741, 2002)

17.36.030 Principal permitted uses.

Mobile/manufactured home parks, in accordance with the provisions of this title and applicable state statutes. (Ord. 386 § 742, 2002)

17.36.040 Permitted accessory uses.

- A. Detached garages and storage sheds constructed in compliance with applicable city ordinances;
- B. Service buildings as required by state statute;
- C. One indirectly lighted sign facing each public street or road on which the mobile/ manufactured home park, fronts,

showing the name of the mobile/manufactured home park, and other information pertinent thereto; provided, that such sign shall not have an area of more than thirty-two (32) square feet, and shall in all respects comply with all city ordinances regulating signs. (Ord. 386 § 743, 2002)