Regulatory Analysis

Notice of Intended Action to be published: 661—Chapter 322
"State Building Code—Manufactured Housing Support and Anchorage Systems"

Iowa Code section(s) or chapter(s) authorizing rulemaking: 103A.7 and 103A.9
State or federal law(s) implemented by the rulemaking: Iowa Code chapter 103A

Public Hearing

A public hearing at which persons may present their views orally or in writing will be held as follows:

January 29, 2025	6200 Park Avenue
2 to 3 p.m.	Des Moines, Iowa

Public Comment

Any interested person may submit written or oral comments concerning this Regulatory Analysis, which must be received by the Department of Inspections, Appeals, and Licensing no later than 4:30 p.m. on the date of the public hearing. Comments should be directed to:

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Purpose and Summary

This proposed rulemaking repromulgates Chapter 322 and implements Iowa Code section 103A.7, in accordance with the goals and directives of Executive Order 10 (January 10, 2023). Iowa Code section 103A.7(1) empowers and directs the state building code Commissioner to formulate and adopt and from time to time amend or revise and to promulgate, in conformity with and subject to the conditions set forth in Iowa Code chapter 103A, reasonable rules designed to establish minimum safeguards in the erection and construction of buildings and structures, to protect the human beings who live and work in them from fire and other hazards, and to establish regulations to further protect the health, safety, and welfare of the public. Pursuant to Iowa Code section 103A.7(2)"c," the rules shall include reasonable provisions for the manufacture and installation of factory-built structures. Iowa Code section 103A.9 states that the state building code shall contain provisions relating to the manufacture and installation of factory-built structures and provides requirements for factory-built structures.

Analysis of Impact

1. **Persons affected by the proposed rulemaking:**

- **Classes of persons that will bear the costs of the proposed rulemaking:**

Installers of manufactured homes must pay $25 for an installation seal, $10 for an installation seal replacement, and $100 for ground support and anchoring system approval. Notably, Iowa Code section 103A.9(2) requires the Commissioner to establish an "insignia of approval" and requires factory-built structures to bear an insignia of approval prior to installation, and Iowa Code section 103A.23 requires the Commissioner to establish fees to defray the costs of administering Iowa Code

chapter 103A and the state building code. Additionally, manufactured home retailers must pay a license fee ($100), and this fee is explicitly established by Iowa Code section 103A.52(2).

Manufacturers and installers (and, by extension, likely purchasers/owners) of factory-built structures incur indirect costs by the nature of needing to meet the requirements of these rules.

- **Classes of persons that will benefit from the proposed rulemaking:**

Iowans who live in and utilize factory-built structures that are subject to these rules, which ensure the minimum safety standards at such structures, will benefit. These rules greatly improve the safety of the persons who live in and use factory-built structures. Manufactured homes are being safely installed in Iowa, pursuant to these rules governing manufactured housing supports and anchorage systems.

2. **Impact of the proposed rulemaking, economic or otherwise, including the nature and amount of all the different kinds of costs that would be incurred:**

- **Quantitative description of impact:**

In fiscal year 2023, the Department collected a total of $91,700 in seal fees and $47,100 in manufactured home retailer license fees. As discussed above, these fees are supported by statute, and in the case of the manufacture retailer license fees, the amount is explicitly stated in statute.

- **Qualitative description of impact:**

The indirect costs incurred by the nature of needing to meet the requirements of these rules are not easily quantified and are necessary to ensure the health, safety, and welfare of Iowans. Additionally, the rules are expressly required by the Iowa Code, so indirect costs of compliance are unavoidable.

3. **Costs to the State:**

- **Implementation and enforcement costs borne by the agency or any other agency:**

The Department's costs related to implementation of Iowa Code chapter 103A and these rules include the costs of personnel to administer the program, including traveling associated with inspections. The Department maintains approximately 9.0 full-time equivalent (FTE) positions to administer the state building code, including 4.0 FTE positions (that also perform other duties) to administer the Manufactured Home and Modular Program. The Department's total budget to implement and enforce the state building code, including these rules, is $1,044,794.

- **Anticipated effect on state revenues:**

In fiscal year 2023, the total seal fees and manufactured home retailer license fees collected by the Department pursuant to Iowa Code sections 103A.23 and 103A.52(2) were $138,800.

4. **Comparison of the costs and benefits of the proposed rulemaking to the costs and benefits of inaction:**

Iowa Code sections 103A.7(2)"c" and 103A.9 require the Department to implement and enforce rules regarding the manufacture and installation of factory-built structures, so inaction is not an option. Additionally, the minimum health, welfare, and safety standards in these rules protect numerous Iowans and non-Iowans who own, reside in, visit, or otherwise use factory-built structures that are subject to Iowa Code chapter 103A and these rules. The modest costs incurred by the public are insignificant compared to the costs of inaction, which would result in unsafe factory-built structure manufacture and installation.

5. **Determination whether less costly methods or less intrusive methods exist for achieving the purpose of the proposed rulemaking:**

Iowa Code section 103A.7(1) requires the Commissioner to promulgate "reasonable rules designed to establish minimum safeguards in the erection and construction of buildings and structures, to protect the human beings who live and work in them from fire and other hazards, and to establish regulations to further protect the health, safety, and welfare of the public." These rules are expressly required to include reasonable provisions for the manufacture and installation of factory-built structures (Iowa Code sections 103A.7(2)"c" and 103A.9). It is the opinion of the Department and the Commissioner that these rules reasonably establish such minimum safeguards for the manufacture and

installation of factory-built structures in Iowa and that making them any less restrictive would negatively impact the health, safety, and welfare of Iowans (and non-Iowans) occupying and otherwise using factory-built structures in Iowa.

Additionally, these rules and fees are comparable to or less than those in neighboring states. Manufactured housing administration and compliance is consistent with all surrounding states as required by the U.S. Department of Housing and Urban Development. However, fees for seals and inspections in Iowa are dramatically lower. For example, Nebraska and South Dakota manufactured home administration and inspection fees range from $500 to $1,200 per home depending on travel distance for inspectors.

Finally, compared to the existing rules, these rules have been streamlined, clarified, and made less restrictive when possible, in accordance with the goals and directives of Executive Order 10.

6. **Alternative methods considered by the agency:**

- **Description of any alternative methods that were seriously considered by the agency:**

Response in section "5," above.

- **Reasons why alternative methods were rejected in favor of the proposed rulemaking:**

Response in section "5," above.

Small Business Impact

If the rulemaking will have a substantial impact on small business, include a discussion of whether it would be feasible and practicable to do any of the following to reduce the impact of the rulemaking on small business:

- Establish less stringent compliance or reporting requirements in the rulemaking for small business.
- Establish less stringent schedules or deadlines in the rulemaking for compliance or reporting requirements for small business.
- Consolidate or simplify the rulemaking's compliance or reporting requirements for small business.
- Establish performance standards to replace design or operational standards in the rulemaking for small business.
- Exempt small business from any or all requirements of the rulemaking.

If legal and feasible, how does the rulemaking use a method discussed above to reduce the substantial impact on small business?

While some manufacturers and installers of factory-built structures subject to Iowa Code chapter 103A and these rules may be small businesses, these rules and fees are required by the Iowa Code. Additionally, these rules protect the health, safety, and welfare of many Iowans and non-Iowans who own, occupy, or otherwise use factory-built structures in Iowa. Even if these rules have a substantial impact on small business (and as discussed above, the costs are not substantial and are supported—or even explicitly required—by the Iowa Code), to exempt or even provide less stringent rules for small businesses would not be feasible or practicable because this would undermine public safety based on nothing more than the size of the business manufacturing or installing the factory-built structure. Finally, any manufacturer or installer (including a small business) can seek a waiver from provisions of these rules pursuant to the Department's uniform waiver rules under 481—Chapter 6.

Text of Proposed Rulemaking

ITEM 1. Rescind 661—Chapter 322 and adopt the following **new** chapter in lieu thereof:

CHAPTER 322
STATE BUILDING CODE—MANUFACTURED
HOUSING SUPPORT AND ANCHORAGE SYSTEMS

661—322.1 Reserved.

661—322.2(103A) Definitions. The definitions in 661—subrule 16.620(4) apply to this chapter.

661—322.3 to **322.10** Reserved.

661—322.11(103A) Support and anchorage of manufactured homes.

322.11(1) *First time installation.* Manufactured homes shall be installed according to one of the following:

a. Homes manufactured prior to October 20, 2008, which are being installed for the first time will be installed with support and anchorage as recommended by the manufacturer and in accordance with federal manufactured home construction and safety standards, 24 CFR Section 3280.306(b), as published April 1, 2004; or

b. Homes manufactured on or after October 20, 2008, which are being installed for the first time shall be installed with support and anchorage as recommended by the manufacturer and in accordance with 24 CFR Part 3285, Model Manufactured Home Installation Standards, as published April 1, 2008; or

c. With a support and anchorage system which is designed by an Iowa-licensed professional engineer and which meets or exceeds the requirements of 24 CFR Part 3285 as published April 1, 2008; or

d. Homes installed in areas subject to a disaster emergency proclamation issued by the governor pursuant to Iowa Code section 29C.6 may be installed in compliance with subrule 322.11(5).

322.11(2) *Reinstallation of homes.*

a. The provisions of this subrule apply only to homes that have been previously installed in the United States and are being reinstalled at either the same location or a different location.

b. The following definitions apply to this subrule.

"Frost-protected footing" or *"frost-free footing."* Foundation material installed to depth of 42 inches below finished grade.

"Ground anchor." A specific anchoring assembly device designed to transfer home anchoring loads to the ground.

"Pier." That portion of the support system between the footing and the manufactured home, exclusive of shims. Types of piers include but are not limited to manufactured steel stands, pressure-treated wood, manufactured concrete stands, concrete blocks, and portions of foundation walls.

"Pier footing." That portion of a support system that supports the piers or blocking, is sized to adequately support the weight of the home at that load point, and is capable of transferring all design loads to the ground.

"Support system." Pilings, columns, footings, piers, foundation walls, shims, and any combination thereof that, when properly installed, support the manufactured home.

c. Homes reinstalled pursuant to subrule 322.11(2) must meet the following mandatory minimum requirements:

(1) Above ground support systems must meet the manufacturer's specifications or the requirements of subrule 322.11(3).

(2) Ground anchors must meet the manufacturer's specifications or subrule 322.11(4). Engineered ground anchoring systems that do not extend to the frost line may be used only if they are approved by the commissioner.

NOTE 1: Pier footings may be placed below the frost line for reinstallation of homes.

NOTE 2: If the home is still under a manufacturer's warranty, the manufacturer's installation instructions should be followed or the warranty may be void.

d. Pursuant to 661—subrule 16.623(2), prior to the reinstallation of a manufactured home, the installer reinstalling the home or the installer hired to inspect the home that is being reinstalled by the owner shall complete the portion of the installation certificate relating to the installation of frost-

protected footings. This portion of the certificate must state that the home is not being installed with frost-protected footings and be signed and witnessed by the installer and the owner. Upon completion of the reinstallation, the installer shall complete and submit the certificate to the commissioner as prescribed by 661—subrule 16.623(2).

NOTE: Iowa Code sections 335.30 and 414.28 have requirements that may affect the reinstallation of homes.

322.11(3) *Requirements for support system installations.*

a. Piers placed on foundations shall be installed and centered directly under the main frame longitudinal beams. The piers should not be farther apart than 10 feet on centers for manufactured homes 12 feet wide or less and not more than 8 feet on centers for manufactured homes over 12 feet wide to less than 16 feet wide and no more than 6 feet on centers for manufactured homes 16 feet wide or more. The main frame, front or back, should not extend farther than two feet beyond the centerline of the end piers.

NOTE: When making excavations for footings and piers on private property, installers shall take precautions to ensure that no telephone, electrical, plumbing or water lines are contacted. Utility line locations shall be verified with the property owner or property owner's representative.

b. Pier foundations shall be placed on level, undisturbed soil or on controlled fill that is free of grass and organic materials. A small amount of sand may be of use to provide a level surface. All pier foundations shall be set level and piers installed plumb. The pier foundation shall be at least a 16″ × 16″ × 4″ solid concrete pad, precast or poured in place, or other approved material. Two nominal 4″ × 8″ × 16″ solid concrete blocks may be used provided that the joint between the blocks is parallel to the main frame longitudinal beam. Concrete used in foundations shall have a 28-day compressive strength of not less than 3,000 pounds per square inch (3,000 psi).

c. Unless otherwise directed by the owner of the site, the soil-bearing capacity of the site may be assumed to be 2,000 pounds per square foot. The acceptable construction under this subrule is based upon a soil-bearing capacity of 2,000 pounds per square foot. Sites with less soil-bearing capacity will require increased-size footings.

Explanation: The permissible footing sizes and pier spacing are based upon a combined live and dead load of 65 pounds per square foot of unit. This assumes that the full snow and internal live load will not be present at the same time.

d. Piers may be constructed of concrete or undamaged nominal 8″ × 8″ × 16″ concrete blocks, open-celled or solid, placed on the pier foundation. All open-celled concrete block shall be installed with the cells of the block in a vertical position. Nominal 2″ × 8″ × 16″ or nominal 4″ × 8″ × 16″ solid concrete blocks may be utilized as needed to achieve the necessary heights of the piers for a particular installation. A nominal 2″ × 8″ × 16″ wood plate, or equivalent, shall be placed on top of each pier, unless there is at least 4 inches of solid block, with shims fitted and driven between the wood plate or solid block and the main frame longitudinal beam. The wood blocking shall not occupy more than a nominal two inches of vertical space, and shims shall not occupy more than one inch of vertical space. Shims that have a thickness of more than 3/8″ shall be hardwood.

(1) Piers up to 40 inches in height, except corner piers over three blocks high (a nominal 24″), may be of single-block construction and shall be installed transverse (right angle) to the main frame longitudinal beam.

(2) Piers over 40 inches in height but not exceeding 80 inches in height and corner piers over three blocks high shall be of double-block construction with every other course either parallel or transverse (right angle) to the main frame longitudinal beam and be capped with a nominal 16″ × 16″ × 4″ solid concrete block or equivalent. Wood blocking and hardwood shims shall be installed accordingly.

(3) Piers over 80 inches in height shall be of reinforced concrete or of double-block construction and installed exactly according to the procedure given in subparagraph (2) above. Only celled concrete blocks shall be used (with open cells vertical) with 3/8″ diameter or larger steel reinforcing rods

placed in the pier corners and all cells filled with 3,000 psi concrete. Wood blocking and shims shall be installed accordingly.

322.11(4) *Requirements for anchorage systems.* When instructions are not provided by the manufacturer, ties shall be attached vertically and diagonally to a system of ground anchors in a manner as illustrated in Figures 4 and 5. The minimum number of ties are listed in Table 6–A. There shall be a diagonal tie between the ground anchors and the unit at each vertical tie. Additional diagonal ties may be required between vertical ties. The ties shall be as evenly spaced as practicable along the length of the unit with not over eight feet open on each end.

a. Ties may be either steel cable, steel strapping, or other materials that meet the requirements of paragraph 322.11(4)*"f."* Ties are to be fastened to ground anchors and drawn tight with galvanized turnbuckles or yoke-type fasteners and tensioning devices. Turnbuckles shall be ended with jaws of forged or welded eyes (hook ends are not approved).

b. When continuous straps (over-the-top tie-downs) are provided as vertical ties, they should be positioned at rafters and studs to prevent structural damage. Where a vertical tie and diagonal tie are located at the same place, both ties may be connected to a single double-head ground anchor provided that the anchor used is capable of carrying the combined loads and is included on a list of approved products maintained by the commissioner.

c. Cable used for ties shall be either galvanized steel or stainless steel and have a breaking strength of at least 4,725 pounds. Cable should be either 7/32″ diameter or greater (7 × 7) steel cable or ¼″ diameter or greater (7 × 19) aircraft cable. All cable ends should be secured with at least two I-bolt-type cable clamps or other nationally approved fastening devices.

d. When flat steel straps are used as ties, they shall conform with 24 CFR Section 3285.402(c)(2). Steel strap ties shall terminate with D-rings, bolts, or other nationally approved fastening devices that will not cause distortion or reduce the breaking strength of the ties.

e. The direction of pull of the diagonal ties should be at a right angle to the main frame longitudinal beam. Connection of the diagonal tie to the main frame longitudinal beam should be in accordance with anchor system instructions for those fastening devices. When steel strap ties are used, care should be exercised that the minimum bending radius is adhered to so the breaking strength is not reduced.

f. Anchors and anchorage materials shall meet the following requirements:

(1) The anchorage materials shall be capable of resisting an allowable minimum working load of 3,150 pounds (pullout in a vertical direction) with no more than 2 percent elongation and withstanding a 50 percent overload. All anchorage materials shall be resistant to weathering deterioration at least equivalent to that provided by a coating of zinc on steel strapping of not less than 0.30 ounces per square foot surface coated. Anchors to reinforced concrete slab or to rock shall be of comparable strength as provided within this paragraph.

(2) Each ground anchor, when installed, shall be capable of resisting an allowable working load at least equal to 3,150 pounds in the direction of the ties plus a 50 percent overload (4,750 pounds total) without failure. Failure is considered to have occurred when the point of connection between the tie and anchor moves more than two inches at 4,750 pounds in the direction of the vertical tie when anchoring equipment is installed in accordance with the anchorage manufacturer's instructions. Those ground anchors which are designed to be installed so that the loads on the anchor are other than direct withdrawal shall be designed and installed to resist an applied design load of 3,150 pounds at 45° from horizontal without displacing the anchor more than four inches horizontally at the point where the tie attaches to the anchor.

(3) Anchors designed for connection of multiple ties shall be capable of resisting the combined working load and overload consistent with the intent expressed in this paragraph.

(4) Ground anchors shall be installed so that the load-carrying portion of the anchor in its final working position is below the frost depth (42 inches), and the anchor head shall be at ground level. Total anchor length shall be more than 42 inches as necessary.

NOTE: When installing ground anchors on private property, installers shall take precautions to ensure that no telephone, electrical, plumbing or water lines are contacted. Utility line locations shall be verified with the property owner or property owner's representative.

TABLE 6–A
MINIMUM NUMBER OF TIEDOWNS
REQUIRED FOR SINGLEWIDE MOBILE HOMES

MOBILE HOME BOX LENGTH NOT EXCEEDING	MINIMUM NUMBER OF TIEDOWNS PER SIDE	
	DIAGONAL TIES	VERTICAL TIES*
40′–0″	3	2
54′–0″	3	2
73′–0″	4	2
84′–0″	5	2

*If more than the minimum number of vertical or diagonal ties have been supplied, they shall all be used.

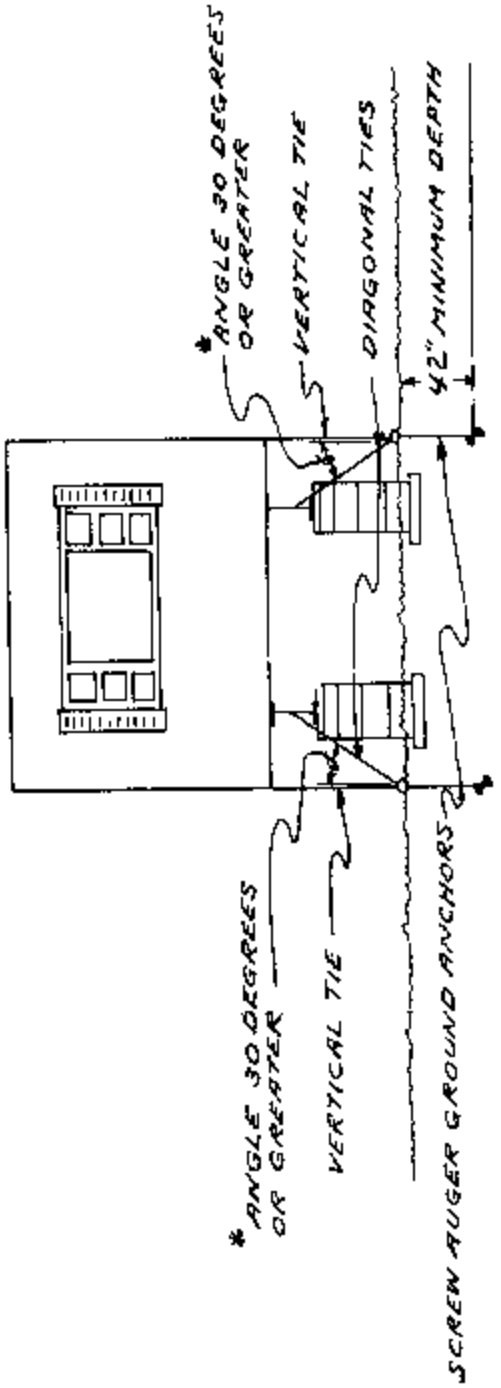
1. Doublewide mobile homes shall comply with Table 6–A except that no vertical ties are required.

2. Wherever a vertical tie and a diagonal tie lie in a plane that is vertical and transverse to the main longitudinal beam, both ties may be connected to the same ground anchor, providing that the particular anchor withstands both loadings.

3. This table shall be used only if there are no manufacturer's approved installation requirements.

FIGURE 4

MOBILE HOME TIEDOWN

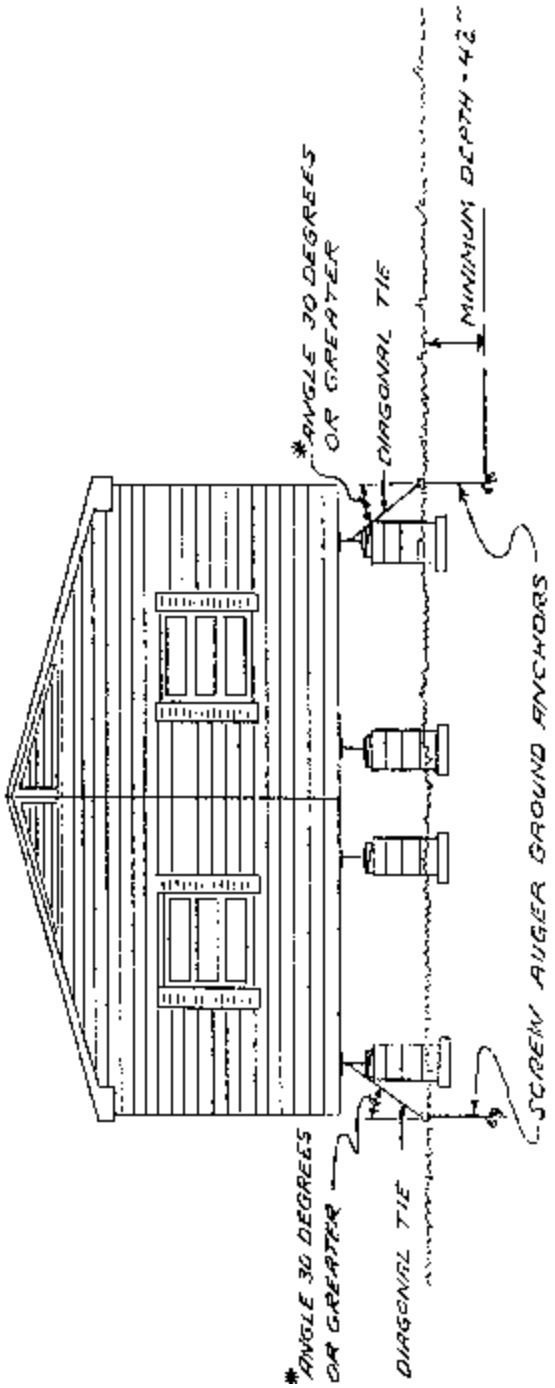


*DIAGONAL TIE SHALL DEVIATE FROM A VERTICAL DIRECTION 30 DEGREES OR MORE.

FIGURE 5

DOUBLE WIDE MOBILE HOME TIEDOWN

* DIAGONAL TIE SHALL DEVIATE FROM A VERTICAL DIRECTION 30 DEGREES OR MORE.



322.11(5) *Installations in disaster emergency areas.* In an area subject to a disaster emergency proclamation issued by the governor pursuant to Iowa Code section 29C.6, a manufactured home may be installed without a permanent support system provided that all of the following apply:

a. The installation complies with anchorage and aboveground support requirements specified by the manufacturer or subrule 322.11(4) as applicable;

b. A government agency or a third-party contractor is contractually obligated to regularly inspect the home while it is occupied and to loosen the ties or straps used in the anchoring system as needed between November 15 of each year and April 15 of the following year, in order to prevent

frost heave from affecting the home, and to retighten the ties or straps on or after April 15 and prior to May 15 of the following year; and

c. The home shall be vacated within 18 months after installation without a support system which is fully compliant with subrules 322.11(1), 322.11(2), 322.11(3) and 322.11(4). A home installed in compliance with this subrule may continue to be occupied if it has been reinstalled in compliance with the provisions of this rule that would apply in the absence of a proclaimed disaster emergency.

661—322.12(103A) Suspension of installation requirements in proclaimed disaster emergencies. The commissioner may suspend any requirement established in this chapter or 661—Chapter 16 for the installation of manufactured homes, provided that all of the following apply:

1. The installation is within an area that is currently subject to a disaster emergency proclamation issued by the governor.

2. The commissioner finds that suspension of the requirement or requirements presents no imminent threat to the health or safety of any individual and specifically of any person who may occupy a manufactured home installed while the suspension is in effect.

3. Any manufactured home whose installation is subject to a suspension of any requirement shall be occupied only for the duration of the disaster emergency proclamation and for no more than 180 days after the expiration of the proclamation, or for a shorter time specified by the commissioner, unless the home has been installed or reinstalled in compliance with all requirements of this chapter and 661—Chapter 16 prior to the expiration of the period specified for suspension of the requirements.

661—322.13 to **322.19** Reserved.

661—322.20(103A) Fees.

322.20(1) All remittances of fees shall be made by check or money order payable to Iowa Department of Inspections, Appeals and Licensing—Building Code Bureau and remitted to the Building Code Bureau, Iowa Department of Inspections, Appeals, and Licensing, 6200 Park Avenue, Des Moines, Iowa 50321.

322.20(2) The following table sets out the fee schedule for the manufactured home program.

Installation Seal	$25
Installation Seal Replacement	$10
Verification Inspections Requested by Installer or Owner	No Charge
Ground Support and Anchoring System Approval	$100

These rules are intended to implement Iowa Code sections 103A.7 and 103A.9.