

**FACT SHEET FOR
TEMPORARY GREENHOUSES**

**UNDER THE NEW JERSEY
UNIFORM CONSTRUCTION CODE**

New Jersey Department of Agriculture
In Consultation with the New Jersey
Department of Community Affairs

June 2007
Revised

PERMIT EXEMPTION FOR TEMPORARY GREENHOUSES

(New Jersey Administrative Code 5:23-3.2(d))

effective November 19, 1990

revised October 15, 2001

4. A temporary greenhouse, also called a “hoophouse” or “polyhouse,” used exclusively for the production and storage of live plants, shall be exempt from the permit requirements of the Uniform Construction Code if it meets all of the criteria of (d)3i through iv below :
 - i. There is no permanent anchoring system or foundation;
 - ii. There is no storage, temporary or otherwise, of solvents, fertilizers, gases or other chemicals or flammable materials;
 - iii. The structure is no wider than 31 feet and there is an unobstructed path of no greater length than 150 feet from any point to a door or fully accessible wall area, the covering of which is a material no greater than six mils (152.4 micrometers) in thickness that yields approximately four pounds of maximum impact resistance to provide egress through the wall; and
 - iv. The covering of the structure is of a material that conforms to NFPA 701.
 - v. If a temporary greenhouse contains any device subject to the electrical subcode or any mechanical equipment subject to the mechanical subcode, a permit shall be required for the device, system or fixture only. If the temporary greenhouse is connected to a potable water system, a permit shall be required for the backflow prevention devices only.

DEFINITIONS

Potable Water Supply: a water supply, either city water or private well, which is intended for drinking purposes.

Permanent Anchoring Device: a device that is not readily dislodged, which is intended to secure a structure for an indefinite period e.g. concrete.

Foundation: a concrete or masonry base, usually below the surface of the ground, which is used to anchor a structure. One can also secure the structure to it.

N.F.P.A. 701: the National Fire Protection Association's standard titled "Standard Methods of Fire Tests for Flame-Resistant Textiles and Films" - the type of material used (combustible vs. noncombustible, wood vs. metal) and how these materials should perform when tested.

Retail Sales: The use of a structure, or part thereof, which is for display and sales purposes and accessible to the public.

Zoning: The partitioning of a municipality by ordinance into sections reserved for different identified uses. Activity in each zone is restricted to the use(s) stated in the zoning ordinances, e.g. agricultural, commercial, residential, etc.

THE PURPOSE OF THE TEMPORARY GREENHOUSE EXEMPTION

The purpose of the exemption is threefold.

First, its provisions apply to all temporary non-retail greenhouses, either those utilized by commercial farmers, farm markets or residential homeowners, and it applies uniformly throughout the Garden State.

Second, farmers will not be burdened with the permit requirements of the construction code and the attendant fees such as site plans signed and sealed by a licensed architect or engineer, building subcode permit fees, etc., and

Third, the exemption will reduce costs to farmers and enhance the economic viability and competitiveness of New Jersey agriculture.

WHAT CAN BE BUILT

Prior to the exemption, existing regulations required that all temporary greenhouses were subject to the permit requirements of the UCC. However, there was a lack of uniformity with regard to the enforcement of the regulations by construction officials throughout New Jersey. This often created financial hardships for farmers and often allowed code officials to treat temporary greenhouse owners differently in various municipalities.

The temporary greenhouse exemption allows farmers to forgo securing a building permit to set up a hoophouse that is used exclusively for the production or storage of live plants.

There are some instances where specific subcode permits are required. If a hoophouse has a heater or fan(s), an electrical or mechanical subcode permit must be secured for the heater or fan unit. If the watering system is connected to a potable water supply or irrigation well, a plumbing subcode permit must be secured for the installation of a backflow prevention device only. These other subcode permits stand on their own and do not trigger the necessity to secure a building subcode permit for the temporary greenhouse.

QUESTIONS AND ANSWERS

1Q. Are temporary hoophouses exempt from local zoning regulations?

1A. When a farmer erects a hoophouse for the purpose of an agricultural/horticultural production facility, the use of the building must conform to the permitted uses in the particular zone in which the hoophouse is located.

2Q. Are construction documents required when a temporary greenhouse is erected?

2 A. No, N.J.A.C. 5:23-3.2(d) states that a temporary greenhouse meeting the criteria set forth in N.J.A.C. 5:23-3.2(d) et seq. shall not require a permit. Since temporary greenhouses which meet the criteria set forth in N.J.A.C. 5:23-3.2(d) et seq. do not require a building permit, plans which are signed and sealed by a New Jersey licensed architect or engineer are not required.

3Q. Is there a limit on the construction type that can be used to erect the frame of a temporary greenhouse?

3A. No. As long as there is no permanent anchoring device or foundation there is no restriction on the type of material used for the frame. However, temporary greenhouses constructed primarily of wood and in close proximity to other

permanent structures may trigger additional fire safety requirements. Therefore, the local fire subcode official must inspect the framework and evaluate the possibility of additional fire safety hazards. If the local fire subcode official determines there are no fire safety problems with the predominantly wood framework, then a building subcode permit is not required. If the fire subcode official determines that there is a problem, the permit is required and the fire separation distances of the building subcode apply.

4Q. On occasion, when the sun is extremely hot, can a shade cloth be placed over the polyethylene to keep the interior temperature of the hoophouse suitable for plant growth?

4A. Yes. As long as there is a means of exiting the framework within 150 feet that does not require going through the shade clothe.

5Q. Since the framework is exempt from a building subcode permit, is a site plan necessary?

5A. No. Site plans are not required for temporary greenhouses under the UCC. However, the township may require a site plan under its local zoning ordinance.

6Q. Are signed and sealed plans required for temporary greenhouses?

6A. No. The framework is not subject to the building subcode permit requirements of the UCC; therefore, signed and sealed plans are not required.

7Q. If the framework of the exempt hoophouse is secured with concrete, is a building subcode permit required?

7A. Yes. When the framework of the hoophouse is permanently embedded in or permanently anchored to concrete a building permit is required.

8Q. Can a concrete pad be poured inside a temporary greenhouse?

8A. Yes. However, concrete cannot wrap around the hoophouse frame. If the frame is embedded in the concrete pad, the frame becomes permanent and a building subcode permit is required. A concrete pad, in and of itself, does not make a temporary greenhouse a permanent structure.

9Q. Is a building permit required for a sidewalk installed in a temporary greenhouse?

9A. NO, a building permit is not required for a sidewalk within the temporary greenhouse. However, if the supporting structures (the hoops) of the temporary greenhouse are imbedded in or touch the concrete, a building subcode permit is

required for the hoop house and sidewalk since the concrete now serves as a permanent anchoring device.

10Q. A crop is produced in the exempt hoophouse and the plastic covering is removed for a limited period of time so consumers can select plant materials (retail sales). Is the exemption being jeopardized?

10A. No. The exemption is only for the production or storage of live plants within the structure. The framework is not a structure provided all of the covering is removed. However, the exception does not permit customers to enter the hoophouse while it is covered or partially covered. The farmer or farm employee can enter the covered hoophouse and remove the plant material for the customer.

11Q. The exemption specifies that there must be “an unobstructed path of no greater length than 150 feet from any point to a door or fully accessible wall area.” What would be an example of an “obstruction”?

11A. Benches or a rail system in a hoophouse would be an example of an obstruction. If the hoophouse is 300 feet or less in length and has a means of egress at both ends, there must be an unobstructed center aisle. If the hoophouse is greater than 300 feet in length, provisions must be made for sidewall egress. It is recommended that the farmer part the plant material or trays every 150 feet in hoophouses greater than 300 feet in length. In addition, a rail system for the benches should not obstruct egress through the walls.

12Q. Are gutter-connected houses subject to a building subcode permit?

12A. Yes. However, it is possible to construct a gutter-connected greenhouse under this exemption. As long as the framework meets all of the criteria of this rule, it is exempt from building subcode permits. In most cases the supporting structure to the gutter connected houses are embedded in concrete and the overall width of the structure usually exceeds 31 feet. In this instance a building subcode permit is required.

13Q. Are two individual layers of six mils polyethylene film designed to be separated by air provided by a small blower fan acceptable in a temporary greenhouse?

13A. Yes. Provided each layer of polyethylene is six mils or less and an electrical subcode permit is secured for the fans.

14Q. Where can I secure documentation stating that the film used to cover the hoophouse conforms to N.F.P.A. 701 flame spread standards?

14A. First ask the supplier who sold the film to secure the documentation from the manufacturer. If the supplier cannot get the information for you, the New Jersey Department of Agriculture has fire-hazard classification test or flame spread test reports for some, not all, of the films as issued by the Underwriters Laboratories Inc.

15Q. Can a hoophouse built under the exemption be used for retail purposes?

15A. No. The hoophouse must be used exclusively for the production or storage of live plants. The public must not have access to temporary greenhouses built under the exemption; nor can the hoophouses be used for a retail sales area. Where farm operators have retail stands, it is recommended that an "Employees Only" sign be posted on any temporary greenhouse built under the exemption which is in close proximity to retail facilities. This will alert the customers that the temporary greenhouse is off-limits to the public.

16Q. Do the temporary greenhouses built under the exemption have to be semi-circular in design (hoops)?

16A. No. Any geometric design is acceptable. It is up to the designer of the temporary greenhouse what style is necessary to achieve optimum horticultural production.

17Q. If a hoophouse is built under the exemption and later the farmer decides to allow retail customers to enter the hoophouse to select plant material, are additional approvals needed from the local code officials?

17A. Yes. The "use" of the hoophouse has changed and the local code official must be notified. The code official must certify that the hoophouse meets the intent of the provisions of the laws governing building construction for the proposed new use, and that such "change in use" does not result in any greater hazard to the public safety or welfare.

18Q. If the hoophouse is erected for agricultural/horticultural production, can all or a portion of it be used to store containers for nursery material, equipment, bags of peat moss, fertilizer, etc.?

18A. No. The temporary greenhouse can only be used to produce or store live plants. If it is to be used for anything other than the production or storage of live plants, a building subcode permit must be secured and it must meet all applicable building subcode requirements. Live plants are unlikely to catch fire; however other materials can be hazardous.

19Q. How does the permit exemption for temporary greenhouses relate to real estate taxes?

19A. The "Farmland Assessment Act of 1964" states that "...structures' shall not include temporary demountable plastic covered framework made up of portable parts with no permanent understructures..." The regulation governing the exemption of temporary greenhouses from the permit requirements of the UCC defines temporary greenhouses.

20Q. Can a temporary greenhouse built under the exemption be attached to a retail sales area?

20A. No. If the hoop house is connected to the retail sales area, it then becomes permanent and a building permit is needed.

21Q. If I drill a separate well to be used exclusively for my irrigation system in my temporary greenhouse, is a plumbing subcode permit needed?

21A. No. A plumbing subcode permit will not be required for the irrigation system. However, a plumbing subcode permit is required for the installation of a backflow prevention device. The backflow prevention device must be installed by a New Jersey licensed plumber.

22Q. I want to connect my irrigation system for my temporary greenhouses to the water supply line for my home and the plumbing fixtures in the separate lavatories for my farm help. Do I have to secure a plumbing permit?

22A. Yes. When an irrigation system for a temporary greenhouse is connected to a potable water supply (either a private well or city water) a plumbing subcode permit must be secured for the installation of a backflow prevention device and all potable water piping that is not part of the irrigation system. However, a plumbing permit is not necessary for the irrigation system in the hoop house and a building permit is not necessary for the temporary greenhouse. The backflow prevention device must be installed by a New Jersey licensed plumber.

23Q. Farmers often install pipe (rail system) to mobilize the tables that hold the plant material so they can be rolled in or out of a permanent or temporary greenhouse. If the pipe is embedded in concrete, is a building subcode permit required for the pipe?

23A. No. The national model building code adopted by New Jersey, the International Building Code – New Jersey Edition 2000, does not specifically address the rail system that farmers use for the tables. The pipe embedded in concrete for the tables is most similar to the frame of a fence. It is not a structure and does not require a building subcode permit. However, the rail system should not obstruct egress.

24Q. Is the pipe for the tables subject to a site plan approval under the UCC?

24A. No. The pipe installation is not subject to site plan approval under the UCC. However, the pipe is similar to fence posts. If a local fence ordinance requires site plan approval for a certain size fence, then a site plan approval may be required. You should check with your local zoning official.

25Q. Are heating units, lights or fans allowed in a temporary greenhouse?

25A. Yes. However, according to the Electrical Contractors Licensing Act of 1962, a New Jersey Licensed Electrical Contractor must install electrical connections to heating units, lights or fans and electrical permits are required. According to the Master Plumbing Licensing Law of 1968, A Licensed Master Plumber must install the potable water supply with backflow preventer to the heating unit and a plumbing permit is required. A building, fire, or plumbing permit will be required for the installation of the heating units and fans. Each permit is distinct and stands on its own. A building subcode permit is not required for the temporary greenhouse.

26Q. Does the owner of a temporary greenhouse built under the exemption have to comply with Chapter 251, P.L. 1975, the Soil Erosion and Sediment Control Act?

26A. The municipality will not require a Chapter 251 soil erosion and sediment control plan since it will not have jurisdiction for a construction permit. However, the soil conservation district may still require a Chapter 251 soil erosion and sediment control plan if more than 5,000 square feet of land is disturbed for temporary greenhouse construction. This requirement can be satisfied if any needed erosion controls are addressed in a farm conservation plan and implemented during construction. The Natural Resource Conservation Service through the soil conservation districts can usually prepare the plan for agricultural producers at no cost. If the farm conservation plan procedure is not utilized, a Chapter 251 plan may be required.

27Q. Does the plastic covering the hoop house have to be removed periodically?

27A. No, in many instances, the polyethylene covering is removed during certain periods of the year, however, the Department of Environmental Protection has objected to the amount of waste polyethylene film this generates and some owners may choose not to remove the plastic every year. Removal of the polyethylene film is optional.

SOURCE OF INFORMATION FOR TECHNICAL QUESTIONS

Zoning:

Municipal zoning officials are listed in the telephone directory under “local government, township name”

Right To Farm – State Agriculture Development Committee (609) 984-2504

Production Practices:

County Agricultural Agent - Rutgers Cooperative Extension is listed in the telephone directory under “county government, cooperative extension”

Greenhouse Design and Environmental Control:

(use of a shade cloth, hoophouse design, various types of polyethylene, single layer poly vs. double layer polyethylene, etc.)

Department of Biological and Agricultural Engineering
Cook College - Rutgers the State University of New Jersey, (732) 932-9534

Soil Erosion and Sediment Control:

NJ Department of Agriculture, State Soil Conservation Committee, (609) 292-5540

SOURCES OF ADDITIONAL INFORMATION ON THE TEMPORARY GREENHOUSE EXEMPTION

Specific questions about the Permit Exemption for Temporary Greenhouses and its application should be directed first to local building officials. Additional information and copies of the Fact Sheet for Temporary Greenhouses can be obtained from the:

New Jersey Department of Agriculture
Agriculture and Rural Development Program
John Fitch Plaza, PO Box 330
Trenton, New Jersey 08625-0330
(609) 984-2506

New Jersey Department of Community Affairs
Division of Housing and Development
Construction Code Element
101 South Broad Street
Trenton, New Jersey
(609) 984-7609

mailing address:
PO Box 802
Trenton, NJ 08625-0802