General Information for Implementation

1. Since some manufacturers use more than one organization to provide DAPIA services, how will a unique site completion numeric identification be assured across the multiple DAPIAs?

In order to ensure that site completion numeric identifications are unique, DAPIAs are required to incorporate some method in their review procedures, and within each specific approval, to ensure a unique identification. This may be done with the incorporation of a three letter abbreviation that has been used for each agency, or through some other system appropriately detailed within each agency's Site Construction (SC) design approval procedures to assure that it's issued identifications are unique.

2. Can a DAPIA approve an SC request and issue an approval before the effective date of the rule?

In order to assist in the transition period and facilitate conversion of Alternate Construction (AC) approvals to SC approvals, the Department will permit DAPIAs to review and issue SC approvals before the March 7, 2016, effective date. However, IPIAs are not permitted to allow homes that will be built under an SC approval to enter the first stage or phase of production until the effective date (March 7, 2016).

3. Please clarify what the effective date means for this rule?

The effective date of the rule means that homes built in accordance with the requirements of the rule cannot enter the first stage or phase of production until March 7, 2016.

4. How does the Department intend to enforce a non-specific definition of "substantial completion?"

This definition was intended to permit flexibility in recognition of the evolving and changing design and construction innovation used in manufactured homes. The Department will be ensuring compliance through measurement against the intent of the rule, as deemed consistent with the types of construction specifically identified in the rule (§3282.602) and whether the construction is of a limited nature and can be reasonably completed in the factory or whether it is more practicable to complete on-site. The Department will monitor the DAPIA approvals and perform monitoring inspections as may be necessary to properly implement and enforce the Regulations.

5. What will be the role of the monitoring contractor, particularly, in regard to the monitoring oversight of on-site work?

The monitoring contractor is expected to develop and implement procedures for evaluating how well the PIAs are performing the responsibilities for which they have been charged under this rule. The design review and auditing procedures are not changing, as this is only extending the quality assurance processes to the home site and will be monitored accordingly. Existing procedures reasonably include review of available records, monitoring of design approvals, monitoring of the oversight of quality assurance systems, retailer lots, and on-site monitoring of construction work.

6. Which documentation (e.g. site inspection reports, IPIA's acceptance of the manufacturer's final site inspection report, etc.) needs to be kept in the home file to support the Subpart I process for homes completed under the on-site rule?

Please refer to 24 CFR § 3282.417(e)(1) for information required to be contained in the manufacturer's records for each home.

7. Section 3282.606(c) requires that the manufacturer or retailer provide a prospective purchaser a copy of the Consumer Information Notice (CIN) before an agreement to purchase is executed. What proof of this will be required by 1) the prospective purchaser to obtain a copy of the CIN from the manufacturer, and 2) the manufacturer to verify that a CIN was provided to the prospective purchaser?

Consistent with best practice for assuring that purchasers and or lessors are provided with the "Notice to Purchaser" under an Alternative Construction approval, manufacturers may choose to include a purchaser and or lessor sign off on a copy of the Consumer Information Notice. Otherwise, a manufacturer's request for SC approval needs to identify the method(s) it will use to ensure compliance with this requirement. The methods must provide for an auditable system that can be monitored by relevant parties such as during record reviews conducted by SAAs and the Department through its monitoring contractor.

8. Can a homeowner be authorized to complete the site work?

The manufacturer may authorize others to complete construction work at the site, but the authorized parties must be a licensed contractor or similarly qualified professional and be provided prior authorization to do the work on the manufacturer's behalf. The homeowner could be allowed to perform the site construction work if authorized by the manufacturer, provided the work is performed under the supervision of a licensed contractor or similarly qualified individual that is authorized by the manufacturer to perform the work and the manufacturer agrees to be responsible for the final inspection and complete the required certification that all site work has been satisfactorily completed and conforms in all aspects to the Standards. Note: It is the manufacturer's responsibility to certify that the construction complies and the retailer cannot sell a home that does not comply with the Standards.

9. Please clarify whether homes designed for Wind Zone I and having roof slopes under 7:12 and contain peak flip, peak cap, or hinged-type constriction roofs in Wind Zone 1 can have roof penetrations completed without an SC approval.

If a home requires site completion of a flue/vent or intake/exhaust or other piping that penetrates the hinged or other site completed portion of a roof, the home must be completed under an SC approval, regardless of roof slope or Wind Zone.

10. Please clarify whether completion of a fireplace chimney termination and or spark arrester can be permitted at the home's installation site without an On-site Construction approval.

In accordance with 3280.709(g)(1)(vii) of the Manufactured Home Construction and Safety Standards, portions of the chimney and termination that exceed an elevation of 13 ½ ft. above ground level may be designed to be removed for transporting the manufactured home and can be completed as part of the home's installation provided the installation work is addressed in the home manufacturer's installation instructions.

11. The Final Rule includes aspects of construction that require an SC approval for which some manufacturers may not have an existing and current AC approval letter. Will the Department allow those affected manufacturers to pursue an SC approval during the 6-month transition period without obtaining an AC letter?

The Department will not require manufacturers to have an SC approval by March 7, 2016, if it does not have a current AC approval for the construction. However, all aspects of construction eligible for an SC approval must have an SC approval no later than September 7, 2016.

12. Please clarify whether the Final Rule requires inspections to be completed within specific timelines.

The Final Rule does not contain timeline requirements for completion of either the manufacturer's inspection or the IPIA's inspection. The Final Rule only provides timeline requirements for providing the inspection report to other parties. The Final Rule requires:

- The manufacturer and IPIA inspections to occur prior to occupancy [3282.605(c)].
- The manufacturer to forward its completed inspection report to the IPIA within 5 days of completing its report [3282.605(d)]
- The IPIA to forward a copy of its acceptance of the manufacturer's inspection report to the manufacturer within 5 days of its acceptance of the manufacturer's report [3280.605(d)(4)], and
- The manufacturer to provide the accepted final site inspection report to the various participants within 5 days of receiving the IPIA's acceptance [3280.605(d)].

13. Who determines the qualifications for an individual completing an inspection on behalf of the manufacturer?

Similar to assignment and completion of quality control inspections at the factory, the manufacturer is responsible to establish the qualifications necessary for an individual to be accountable to complete the manufacturer's inspections as required by the DAPIA-approved inspection checklist. The IPIA is responsible to ensure that the manufacturer is capable of following its quality assurance manual and that it builds conforming homes on a continuing basis. As such, the IPIA is responsible to identify to the manufacturer and the DAPIA if it believes the manufacturer's inspector qualifications may be resulting in failures to conform.

14. In the event a manufacturer has multiple SC's on the same house, is there any difference in how these homes are reported?

Similar to manufactured homes that may be built under more than one AC letter, site inspections and reporting requirements for a home with multiple SC approvals remain approval specific. Therefore, reporting for a home built under more than one SC approval or with a combination of SC and AC approvals must conform to the terms and conditions of each approval and reported under each approval.

15. What is the purpose of posting a homeowner notice in the house [§3282.606(b)] if the customer will be handed the notice by the retailer [3282.606(c)] and if the customer is not allowed to move in before the work is completed?

The notice provided to a purchaser prior to entering into a sales agreement is a disclosure that initially informs the prospective consumer about work that will be required on-site in order for the home to comply with HUD's standards. The notice provided in the home serves multiple purposes. In the event the home is not finished for some time after the sales agreement is finalized, it serves as reminder of the work necessary to complete the home on- site. The notice in the home also provides notification to an occupant that may not be the person or persons that entered into the sales agreement.

16. Is SC construction limited for production in manufacturing facilities, or does it include retailer operations that may provide after sale construction /alterations?

The provisions and requirements for the on-site completion of construction of manufactured homes included in 3282, Subpart M is intended to address construction and features that the home manufacturer cannot complete at the factory for some valid reason. The procedures established through these regulations are not intended to address retailer alterations that are not known by the home manufacturer or other construction work that is provided after the sale of a home.

17. Please clarify the site-installed or completed appliances that would require an SC approval and those that would not require an SC approval.

Examples of site-installed or completed appliances that <u>would</u> require approval and inspection under Site Construction (SC) include but are not limited to:

- Site completion of the installation of a water heater, including site completion of venting, which complies with the standards in all other respects.
- Site completion of the installation of a heating system internal to the manufactured home, including site completion of venting.
- Site completion of the installation of an optional appliance such as a fireplace when on-site completion requires connection of exhaust/venting.
- Site completion of a home shipped with electric appliances, but factory constructed with optional gas risers provisioned for the possibility of gas appliance conversion before retail sale.

Examples of site-installed or completed appliances that <u>would not</u> require approval and inspection under Site Construction (SC) include:

- Alterations that involve the replacement of a plug-in electrical appliance where the replaced item is of the same configuration and rating as the one being replaced. Refer to §3282.7(c).
- Alterations that involve the addition of a plug-in electrical appliance not provided by the home manufacturer, if the rating of the appliance does not exceed the rating of the receptacle to which it is connected. Refer to §3282.7(c).
- Factory preparation of a home built for a site-installed clothes dryer. Refer to §§ 3280.708, 3285.504(d), and 3285.505(d).
- Factory preparation for field application of an external heating or combination heating/cooling appliance. Refer to §§3280.707(1)(ii) and 3280.709(e)(6).
- Field conversion of orifices for liquefied petroleum gas vs. natural gas. Refer to §3285.904(d)(2).
- Site installation of any appliance that is not otherwise required by the Manufactured Home Construction and Safety Standards (i.e. refrigerator) and provided installation of the appliance would not take the home out of compliance with the Standards.
- Site completion of the installation of a range or cooktop as long as all provisions for future installation of the appliance are provided by the manufacturer including:
 - Interior finish required by §3280.203(b)(4)
 - Kitchen cabinet protection required by §3280.204
 - Mechanical ventilation required by §3280.103(c)(2)
 - Electrical circuit and receptacle required by §§3280.805(a)(3) and 3280.806(c)
 - Fuel line supply and risers with shut off valves at the point of future appliance connection, the outlet of which is closed by threaded pipe plug or cap, with all supply piping sized and as required by §3280.705
 - A permanent label placed adjacent to the supply indicating the maximum rating of the appliance (electric or gas) which can be connected to the electrical circuit or gas piping factory-provided.
 - Descriptions of any testing that must be done upon completion of appliance connections to ensure compliance.
- 18. A manufacturer may elect to build homes prepared for the anticipation of site-completed construction work that may not be requested by a purchaser in a sales agreement or finished by the retailer as goods and services necessary to complete the sale. For example, a home manufacturer may elect to build homes prepared for the site installation of solar panels or carports or prepare homes for a gas appliance by stubbing gas lines to the appliance location but provide an electric appliance with the home. Due to any number of reasons, the completed construction of the solar panels or the completion of the carport or conversion to a different appliance may not be requested by the homeowner until after the sale is complete and outside of the home manufacturer, retailer, and installer control. How is this scenario to be handled since inspections and a final inspection report are required prior to occupancy?

For circumstances such as that described, the Department understands the need to allow for a simple and effective solution. Therefore, if the site construction is not necessary in order for the home to comply with the Manufactured Home Construction and Safety Standards and is not part of a the sales agreement, the DAPIA-approved site-inspection checklist of the SC approval may contain a provision for the return of the inspection checklist, completed by the retailer or the installer, as not selected for installation by the purchaser.

19. Will the Department reconsider certain and specific construction elements to be completed at the final installation site as part of the installation of the home rather than require an SC approval for examples including a fireplace hearth completed across a marriage line, dormers, floor plugs for homes designed for placement over a heated basement, or shipped loose exterior doors?

The Department will only permit certain limited elements of construction for tiled tub surrounds and interior doors that span the mate line of a home to be completed without an SC approval. The Department will also permit a home to be shipped with a basement stairwell floor plug, provided the stairwell area contains surrounding walls and either an exterior or interior weather tight door for access to the basement stairs. In addition, a permanently wired light must be installed on the ceiling of the stairwell area and connected to a switch, installed at the factory, on one of the surrounding closet walls, to operate the overhead light in the closet area. The switch must also be permanently wired to a junction box, installed in the floor (basement ceiling) to operate a future (on site-provided) light fixture to be installed in the basement.

The finishing of these elements can be done at the site provided that each element is provided with specific DAPIA-approved instructions for completing the work in conformance with the Manufactured Home Construction and Safety Standards. In addition, the manufacturer would be responsible to develop and implement an optional feature installation checklist (also to be DAPIA-approved and provided with the home installation manual) to be completed by the individual or entity completing the finishing work at the installation site and the completed inspection record returned to the manufacturer and maintained with all other records relating to the manufacture and assembly of the manufactured home.

The Department continues to require SC approval for elements included in the question such as a fireplace hearth completed across a marriage line, site completed or installed dormers, and site-completion of shipped-loose exterior doors and windows.

DAPIA Approval of Manufacturer Requests for On Site Completion

20. Is it permissible for a manufacturer to bundle multiple aspects of construction that would be site completed under one site completion approval request?

The intent of the regulation is to maintain a system of approvals and inspections that can be easily navigated and tracked from design through final site inspection. Therefore, bundling of multiple aspects of construction into a single SC approval needs to be reviewed very closely in order to ensure that the system of design approvals and inspections can result in compliant construction on an ongoing basis. Bundling of various site construction elements/aspects/items may be allowed under one SC approval only on a case-by-case basis, subject to the approval of the DAPIA and required concurrences of the IPIA and should be closely coordinated with the Department to avoid potential issues and concerns.

21. Can there be a single DAPIA approval issued to a corporate manufacturer for a corporate design package that includes multiple, subsidiary manufacturing locations?

It is possible for a DAPIA to review and issue approval for an SC approval request for multiple manufacturing locations that use a single design approval manual and shared elements of a Quality Assurance Manual. However, all requirements and specifics necessary to ensure each location can build and complete compliant homes must be included in the approval. Necessary considerations that must be addressed include but are not limited to potential facility-specific quality control checklists, on-site inspection checklists, whether multiple IPIA's are involved requiring multiple written agreements and concurrences, as well as how the manufacturer will track, inspect, and report homes on a facility-specific basis.

22. Does a DAPIA's approval and unique site completion approval numeric identification (SC-XX) need to be IPIA and production facility-specific?

A DAPIA-issued, site construction approval, must include all necessary specifics that include but are not limited to identifying the specific manufacturing facilities that may use the approval, facility-specific quality control checklists, on-site checklists, and each IPIA must provide a written agreement to be responsible to complete on-site inspection of the homes built under their respective in-plant surveillance and the affected IPIAs must also concur on the quality systems developed to control in-plant and on-site construction.

23. Is the DAPIA required to initiate contact with the IPIA(s) after a request for approval has been submitted by a manufacturer?

It is the manufacturer's responsibility to coordinate with its contracted IPIA(s) and DAPIA(s) to develop a compliant and complete Site Construction approval request. The DAPIA is responsible to ensure, before it approves a request, that the manufacturer's request addresses all requirements for IPIA agreement(s) and concurrence(s).

24. Is there a particular format (e.g. a simple email, an official notice on a letterhead, etc.) for a DAPIA's notice of approval (or rejection) to a manufacturer?

There are no specific formatting requirements for a DAPIA notification of approval. However, the notification of approval or rejection to the manufacturer and HUD must be made pursuant to all requirements of §3282.603. Each DAPIA should develop its procedures for handling requests for on-site construction completion that it needs to implement and enforce with its clients.

25. Is a formal rejection notice anticipated, or would the expectation be that the deviation report process would apply and a back and forth dialogue would ensue until the noted deficiencies have been adequately addressed?

If a DAPIA finds that a manufacturer's request does not meet the requirements contained in the Regulations, then it must notify the manufacturer that its request is denied and provide the reasons for the denial. Each DAPIA should develop its procedures for handling requests for on-site construction completion that it needs to implement and enforce with its clients. The design and quality assurance manual deviation report process may be integrated into that process provided the methods meet the requirements for notification and set forth reasons for denial.

26. Is the manufacturer required to supply and ship all of the materials, including fasteners, needed for the completion of the on-site work along with manufactured home?

The manufacturer will need to comply with all terms and conditions outlined in each DAPIA-issued SC approval. This approval needs to identify the specific items that must be completed at the factory versus those aspects to be completed on site and include listing of materials and components that will be shipped with the home and provided on site. These aspects will be controlled through manufacturer inspection, IPIA surveillance and inspections, and will be subject to monitoring by the Department.

27. Section 3282.604(e) requires the DAPIA to review Subpart M approvals every three years. How is this to be documented and monitored?

Each DAPIA needs to develop its procedures for completing and documenting the required reviews every three years. The procedures and resulting documentation of the three year reviews must result in clear documentation, available to the IPIAs and the Department, that the approvals are valid and current. As potential options, SC approvals may be re-approved every three years if the DAPIA deems that action appropriate or the DAPIA may stamp those approvals as limited approvals with a 3-year expiration noted on the approval stamp. Other methods may be developed to meet this intent. The Department will monitor DAPIA performance in this regard through monitoring.

28. Must dormers completed on-site be an approved engineered dormer set provided by the manufacturer or will stick built (i.e. dormers fabricated on-site) be allowed?

Specific instructions for completing work on-site must be DAPIA-approved and include the methods by which a manufacturer can choose to complete the construction on-site. In addition, the quality control and on-site inspection checklists must be adequately detailed enough to ensure conformance with the designs and where the designs are not specific, to the Standards.

Reporting and Record Keeping

29. Will there be a specific format required for manufacturer systems of tracking the status of homes, or is it at the discretion of each manufacturer?

Each manufacturer must establish and implement its method for tracking homes from the time homes are built through to the time the homes are inspected by the IPIA. Each system must be part of the request as well as approval issued by the DAPIA. The tracking and reporting systems used in the current Alternative Construction process may be used as examples to accomplish tracking and reporting.

30. What level of detail is anticipated for the description of on-site work required to be included in monthly production reports (HUD 302)?

Each manufacturer must establish and implement its method for reporting a brief description of the onsite work applicable to each home it builds under an SC approval. This method must be included in the request for the DAPIA's approval and accomplish the intent of being able to understand from reviewing the report, the extent of the on-site construction work and inspection(s) expected for that construction.

IPIA Inspections for On Site Completion Approvals

31. Will the IPIA be expected to monitor all elements of the on-site work throughout its duration, or just at the final inspection?

The IPIA is responsible to complete a full inspection of on-site work, whether managed through staged or multiple inspections or whether managed through inspection accommodated by access panels that permit inspection after completion. The site-inspection checklist must be developed in cooperation with each applicable IPIA and be included in the DAPIA approval.

32. Can there be a simple sign-off (such as an IPIA's acceptance statement) on the manufacturer's inspection report for its final inspection?

Yes, there can be a simple sign off documenting the IPIA's written acceptance of the manufacturer's inspection report. However, in that event, the entire manufacturer inspection report also becomes the IPIA's record of its inspection. Whether a separate inspection report is developed or whether an acceptance statement on the manufacturer's inspection report is utilized, the methods expected and required for any given SC IPIA inspection acceptance need to be auditable and outlined in each approval and demonstrate compliance with 3282.603(d)(9).

33. Will the IPIA be required to issue an independent inspection report document?

Consistent with §§3282.605(d)(3)(i) and (d)(3)(iii), in order to document an IPIA's acceptance of the final site construction, an IPIA may issue its own independent inspection report using the DAPIA-approved inspection checklist, or it may indicate its acceptance, in writing, of the manufacturer's completed site-inspection report by alternate means. See response to the previous question 32, above as well.

34. How will the prohibition against occupancy before IPIA approval of the final inspection report and issuance of the certificate of completion be enforced from a practical standpoint?

IPIA's are responsible to complete inspections prior to occupancy. IPIA's need to report to HUD, the DAPIA, and manufacturer whenever any home is occupied before it inspects for compliance with all SC requirements and the Standards. IPIAs are also responsible to monitor the manufacturer's systems for notifying the IPIA when homes are ready for inspection and assuring that homes are not occupied before IPIA inspection and acceptance of the manufacturer's final site inspection report. This would be enforced on a case-by-case basis as determined based on IPIA inspection reporting or other sources of information indicating nonconformance. IPIAs are to monitor and report per 3282.607(g) specifically on this issue.

35. Section 3282.605(d)(3)(ii) appears to only require the IPIA to red tag a home when the manufacturer is "not performing adequately in conformance with the approval" and in the context of the final inspection. Is this correct?

No. An IPIA is required to red tag a home when it finds any failure to conform on site, regardless of when the issue is found during the IPIA's on-site inspection.

36. Please clarify the requirements regarding the requirement for the IPIA to conduct an inspection of the construction completed on-site. Is it acceptable for the IPIA to "demand" that the manufacturer supply a third-party to do the IPIA required inspection. In other words, can the IPIA decline to do the inspection and force the manufacturer to come up with someone to do them.

In order for a manufacturer to obtain DAPIA approval for an On-site Completion of Construction (SC) approval request, the IPIA for the specific production facility (IPIA of record) must agree in writing to complete the IPIA inspections required on-site. The Department will allow the IPIA to delegate the on-site inspection work to a qualified, independent inspector that the IPIA has determined to be acceptable and meets the qualified and independent requirements.

The IPIA of record however remains responsible for monitoring completion of its inspection prior to occupancy, the result of the completed IPIA inspection, as well as the reporting and recordkeeping requirements and timelines regardless of who it may have delegated and authorized to conduct the inspection on its behalf. Within the requirements stated in the answer, it would be between the manufacturer and the IPIA of record to agree on terms of identifying qualified inspectors and arranging for the required IPIA inspection.

37. Who determines the qualification(s) for an individual completing an inspection on behalf of the IPIA?

The IPIA is solely responsible for determining the qualifications required of independent inspectors it will accept to be an IPIA representative inspecting on its behalf.

Alternative Construction vs. On-Site Construction

38. Will HUD continue to provide AC approvals for construction that can otherwise be addressed through an On-Site Completion approval?

The Department will not review or approve AC requests for construction that can otherwise be approved through an SC approval. In order to facilitate a reasonable, yet timely transition from ACs to SCs, the Department is permitting a 6 month transition period, ending September 7, 2016. All ACs that can otherwise be approved through an SC approval, must be transitioned by September 7, 2016.

39. Is it permissible to produce a home that has both an AC approval and an SC approval?

Manufacturers may build a home that falls under both types of approvals, but the terms and conditions of each respective approval must be met, including identification of SC and AC in serial numbering.

40. Regardless of the specifics, can a manufacturer elect to request an AC approval rather than pursue an SC approval for construction that is eligible for SC approval?

Manufacturers should work with their IPIA(s) and DAPIA(s) to transition eligible AC approvals to SC approvals. After September 7, 2016, manufacturers will no longer be granted AC approval for construction eligible for SC approval. During the transition period (March 7, 2016 through September 7, 2016), existing AC approvals for construction that would be eligible for SC approval will continue to be allowed until the transition period is ended or until an SC approval is issued, whichever occurs first.

41. Can a manufacturer request an AC that covers aspects also covered by an SC approval?

For new or renewal AC requests that contain elements that include aspects of construction that require AC approval and have aspects that are eligible for SC, an AC request/approval will only be allowed during the transition period. Thereafter AC approvals must be modified or amended to remove aspects covered by a SC approval. For homes that incorporate aspects covered by an AC and SC approvals, all terms and conditions of each approval must be adhered to.

42. Why are attached garages not addressed in the on-site rule and will they be added later?

Due to the complexity of the structural design of the home and site construction that may be required based on the various manufacturer options and anticipated garage construction and location on home plans, the Department has decided to remain actively involved in the review and approval of such construction. During the interim, manufacturers may continue to submit requests for attached garages under the Alternative Construction provisions of the Regulations (24 CFR 3282.14). HUD is planning to revise the standards to include provisions for attached garages and once that is done, the Department would then be in a position to revise the on-site construction completion rule. Any such proposal either coming from HUD or the public would be forwarded to the MHCC for review.

Clarifications on Correlating Standards Changes

43. Section 3282.603(e) refers to 3282.603(d)(3). Is this correct?

The current reference within 3282.603(e) incorrectly refers to paragraph (d)(3) of this section. The correct reference is to paragraph (d)(4) of this section that addresses the quality assurance manual approval.

44. If previously listed truss designs are to be used in a home after March 7, 2016, do they need to be re-designed for 20 psf load or 40 psf load and does the Department have a grace period for these designs to comply?

Please see FAQ 56.

45. In order to trigger the 40 PSF attic load design criteria in 3280.305(k)(1), does the space need to meet both height and area requirements, or does the space only need to meet one of them to require attic load design?

In order to trigger the 40 PSF design live load requirement, the attic space must meet both the ceiling height and living space (habitable room) requirements of the Standards.

46. Please clarify if the standard defines a habitable room as a room or enclosed floor space at least 5 feet horizontally without obstruction in each direction, 50 square feet minimum floor area, a ceiling height of 84 inches for at least 50% of the room's floor area, and including the floor area between 60 inches and 84 inches of ceiling height. Is this correct?

Yes, these are the requirements related to ceiling height and living space that are applicable to determining where a 40 psf design live load is required for attic floor areas in homes having roof slopes of 7:12 or greater.

47. Is it permissible to build a home with a roof slope of 7:12 or greater, without any access to the roof cavity and as such without any floor load design requirements?

Please see FAQ 56.

48. For homes with roof slopes less than 7:12 with an attic area, does the bottom chord of the truss need to be designed for a minimum 20 PSF load, regardless of whether an access is provided?

Please see FAQ 56.

49. The scope of the Department's February 3, 2016 memorandum regarding storage live load considerations only addresses homes with roof slopes less than 7:12. What are requirements for homes with roof slopes of 7:12 and greater if the attic space does not meet ceiling height and living space requirements of the standards but the design of the roof truss due to chord and web placement does not allow for storage?

Please see FAQ 56. Note the design requirements will apply regardless of web and chord placement.

50. It is clear that both standards 3280.305(k)(1) and 3280.305(k)(2) speak to design requirements for an attic "floor". A floor by definition is something that someone one can walk on or store things on. Is the standard intended to address design requirements only when there is factory completion of a walking surface in the attic space?

The Department's standards for live load (40 psf live load and 20 psf storage live load) apply regardless of whether or not a home manufacturer provides a walking surface in the attic space.

51. It appears the 40 psf live load requirement of 3280.305(k)(1) only applies to areas of the attic space where the ceiling height and living space requirements are met. Can you provide guidance on other areas in the attic space where the ceiling height and living space requirements are not met?

For homes with attic access openings of 30inches by 22 inches or greater and having roof slopes of 7:12 and greater, the attic space must be designed for either:

a) 40 psf live load for areas where the attic space meets ceiling height and living space requirements of the standards), and/or

b) 20 psf storage live load for areas where the attic space does not meet ceiling height and living space requirements.

52. If a truss is to be listed based on tests, how are the tests to be run? Section 3280.402 of the standard does not address the application of bottom chord live load.

Trusses that are to be qualified by testing must be tested in accordance with 3280.402. If using a Proof Load test or Ultimate Load test, the live load application required by 3280.402(d)(1)(ii) and 3280.402(d)(2)(iii) must integrate the simultaneous application of the appropriate bottom chord live load applied at the same incremental rate as that required for the roof live load applied to the top chord. It is also noted that the additional loads must be considered as part of the manufacturer's DAPIA approved design package and addressed within the manufacturer's DAPIA-approved installation instructions.

53. Please clarify that if an access panel is provided for homes having roof slopes less than 7:12 and the access panel is smaller in either direction than the minimum dimension triggering storage live load design (30 inches or 22 inches), the access must be labeled with the warning if the truss is not designed for 20 psf.

Please see FAQ 56. If the access panel does not meet the dimension in either direction (length or width), the roof trusses do not need to be designed for storage live load as long as a Warning label is provided on or near the access panel.

54. If the 20 psf storage live load is provided for in a design, how much of the bottom chord length needs to be loaded?

In order to ensure uniform application and enforcement of the storage live load design, the full bottom chord between support points must be designed for the storage live load.

55. If no access is provided, is the design live load zero?

Please see FAQ 56.

56. Please clarify when manufacturers need to design the bottom chord of roof trusses for attic live loads.

Homes that enter the first stage or phase of production on or after March 7, 2016, regardless of roof slope and having an attic access opening of at least 30 inches by 22 inches, must incorporate design of the attic floor for the appropriate design load as required by 3280.305(k). For these homes, the manufacturer shall also ensure the attic loads are carried through the home's structural system and foundation to the ground.

Homes that enter the first stage or phase of production on or after March 7, 2016, that are provided with an access panel to the attic that does not meet either the 30 inch or 22 inch dimension, the attic floor does not have to be designed for the loads set forth in 3280.305(k). However, the manufacturer in this circumstance, must place a warning label on or adjacent to the access panel that states: WARNING: ATTIC IS NOT DESIGNED OR TO BE USED FOR STORAGE. ACCESS IS PROVIDED FOR SERVICE OR INSPECTION ONLY. The text of the label shall be at least ½ inch high and the label shall be at least 5 inches by 7 inches. In addition, the access panel needs to be sealed upon final site or IPIA inspection when the attic floor has not been designed for 20 psf or 40 psf loads.