



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-8000

ASSISTANT SECRETARY FOR HOUSING-
FEDERAL HOUSING COMMISSIONER

JAN 26 2009

09-XX-AC

XX. XXXX XXXXXXXX
XXXXXXXXXXXXXXXXXXXX
XXXXXXXX XXX
XXXXXXXXXX
XXXXXXXXXXXXXXXXXX

Dear XX. XXXXXXXX:

This letter is in response to your request for Alternative Construction (AC) approval dated XXXXXX XX,XXXX, with subsequent support letters from XXX, XXX, XXXXX, XXX, and XXX. Specifically, XXXXXXXX XXX, (XXXXXXX) requests that the Department not enforce the Federal Manufactured Home Construction and Safety Standards (Standards) for on-site completion of the roof and roof-ridge interconnections. In addition, the letter requests the Department to review specific truss designs and details determined by XXXXXXXX as a representative of worst case conditions that are intended to cover all of the truss designs that could be used by XXXXXXXX. Finally, the letter requests that Department not require an on-site inspection of the roof and roof-ridge interconnections for homes constructed under this AC letter.

The Department determines this request for AC approval to be consistent with the objectives of the National Manufactured Housing Construction and Safety Standards Act of 1974 (the Act), as amended by the Manufactured Housing Improvement Act of 2000. In accordance with 24 CFR §3282.14(c) of the Federal Manufactured Home Procedural and Enforcement Regulations (Regulations), the Department will not take enforcement action against XXXXXXXX for violations of Sections 3280.206(c), 3280.305(e), 3280.307, 3280.504(c)(1) and 3280.505 of the Standards and 3282.205(c) of the Regulations, as long as XXXXXXXX complies with the following requirements:

1. All model designs, installation drawings, and procedures must be approved by your DAPIA before the manufacture of the homes. The model and drawings must comply with the Standards in all other respects. Your DAPIA must also determine that designs and details conform to the Standards in all other respects.
2. XXXXXXXX will limit production to a maximum of 600 homes for the manufacturing facilities listed in Attachment A, which must be completed within two years from the date of this letter.

XXXXXXX will use one of the three DAPIA-approved truss cap drawings (see Attachment B) and adhere to all the fastening, framing, and other requirements therein to complete the ridge peak assembly. All trusses used by XXXXXXXX must not exceed the design limitations of the ridge peak assemblies listed below:

Drawing No. ¹	Maximum Roof Slope	16" Truss Spacing		24" Truss Spacing	
		Roof ²	Wind	Roof ²	Wind
XXXXXXX	7:12	North	WZ I	Middle	WZ I
XXXXXXX	7:12	North	WZ I	Middle	WZ I
XXXXXXX	7:12	North	WZ I	Middle	WZ I

Notes:

1. Fastening details, truss spacing and design limitations are listed on drawings in Attachment B.
 2. North qualifying trusses may be used for all load zones; Middle qualifying trusses may only be used for middle and south load zones; South qualifying trusses may only be used for the south load zone.
4. The retailers listed in "Attachment C" are approved to sell homes constructed under this AC.

With the approval from its DAPIA and concurrence of its IPIA, XXXXXXXX can add retailers/dealers to this list. However, to assist the Department with the requirements of §3282.14(c)(2), the DAPIA will be responsible for notifying the SAAs of the states in which the homes built under this AC approval will be located, or offered for sale if the home sites are not known. For states that do not currently have an SAA, HUD serves as the administrative agency and thus will be notified as the SAA. XXXXXXXX will be responsible for notifying the IPIA and the retailers of the homes built under this AC approval.

In conjunction with this AC approval, XXXXXXXX must maintain correspondence from its DAPIA granting approval of additional retailers and must send copies to the Department.

5. XXXXXXXX will ensure that each prospective purchaser receives a copy of the enclosed Notice to Purchaser (see Attachment D) indicating the type(s) of construction used before entering into any sales agreement. Alternatively, XXXXXXXX may place the "Notice to Purchaser" in clear view, next to the Health Notice on formaldehyde emissions. It must not be removed until the sale of the home is completed.
6. XXXXXXXX's quality control personnel will complete a Quality Control Checklist (see Attachment E) before homes are shipped from the manufacturing facility and will maintain the checklist with other applicable QC forms.
7. A licensed contractor or similarly qualified professional selected by XXXXXXXX will complete all site construction. XXXXXXXX will provide each contractor with DAPIA-approved plans and instructions required to complete all site work that is specific to each individual home.

8. XXXXXXXX will provide each home with the DAPIA-approved installation instructions for the installation of the home at the site and the joining and completion of all parts of the home. Your DAPIA will approve the installation instructions to the extent that they ensure compliance with the applicable Standards.
9. XXXXXXXX will provide all materials for completion of the roof including sheathing, underlayment, flashing, shingles, fasteners, overhang ridge venting.
10. XXXXXXXX will cover and temporarily seal all unfinished roof sections with rolled roofing or other DAPIA-approved material to prevent moisture from entering the home until the home is completed on site.
11. XXXXXXXX will use methods cited in the DAPIA-approved instructions to complete the framing, insulation, and installation of roofing material.
12. XXXXXXXX is responsible to ensure that all construction necessary to conform to the Standards which is not specifically identified in this AC approval letter will be completed in the factory before shipment of the home from the production facility.
13. XXXXXXXX will ensure that the roof ridge assembly has been manufactured in accordance with one of the three DAPIA-approved ridge cap assembly methods listed in item 3 and that the correct framing plan is provided with the home.
14. XXXXXXXX will provide adequate attic ventilation and cross-ventilation for all portions of the roof system affected by the site-installed roof ridge assembly in accordance with the DAPIA-approved designs.
15. XXXXXXXX will provide DAPIA-approved access panel(s) of at least 14.5" by 22" to allow for the on-site inspection of roof ridge interconnections after roof close-up. While not required, it is recommended that homes be inspected prior to occupancy.
16. All flues and plumbing vent pipes shall be installed in the fixed portion of the roof.
17. If XXXXXXXX changes a truss design or vendor after the AC approval letter is issued, then the DAPIA will ensure, by reviewing truss calculations or truss test data, that the new truss design is equivalent to or exceeds the original truss design including consideration for end loads.

18. XXXXXXXX will provide the Department with cumulative production status reports (see Attachment F) on units manufactured under this AC approval. The production status reports must be cumulative for the approval period and include all of the information identified in Attachment F. The production status reports must reference this approval and plant facility location and must contain the date of production, serial number with “AC”, the certification label numbers, and shipping destination for each home. As the homes are completed on the homeowners’ final sites, XXXXXXXX must update the production status reports by adding the physical address of each home site. The production status reports must be dated and signed by an authorized representative of XXXXXXXX who must submit these cumulative production status reports to the Department on a quarterly basis to the following address:

Office of Manufactured Housing Programs
US Department of Housing and Urban Development
451 7th Street SW, Room 9164
Washington, DC 20410-8000

19. XXXXXXXX will include the designation 09-XX-AC on all attachments referenced in this letter.

The Department is forwarding a copy of this letter to your DAPIA, IPIA, and appropriate SAAs. The DAPIA is to continue approving additional models under 09-XX-AC and the IPIA will continue to permit the use of alternative construction. The DAPIA may also continue to approve additional retailers with concurrence from the IPIA, so long as the DAPIA notifies affected SAAs and copies those agencies with the original letter and any addenda or amendments.

Please note that the Department’s decision does not affect any rights that manufactured home purchasers may have under the Act. This decision is limited solely to the subject request and only applies to XXXXXXXX’s manufacturing operations listed in Attachment A.

Please reference File No. 09-XX-AC in any correspondence about this specific AC approval. If you have any questions concerning this matter, please contact Daniel Carpio of this Office at (202) 708-6423.

Sincerely,

William W. Matchneer III
Associate Deputy Assistant Secretary for
Regulatory Affairs and Manufactured Housing

Enclosures

cc: HUD Contractor; IPIA/DAPIA(s); SAA(s)

ATTACHMENT B

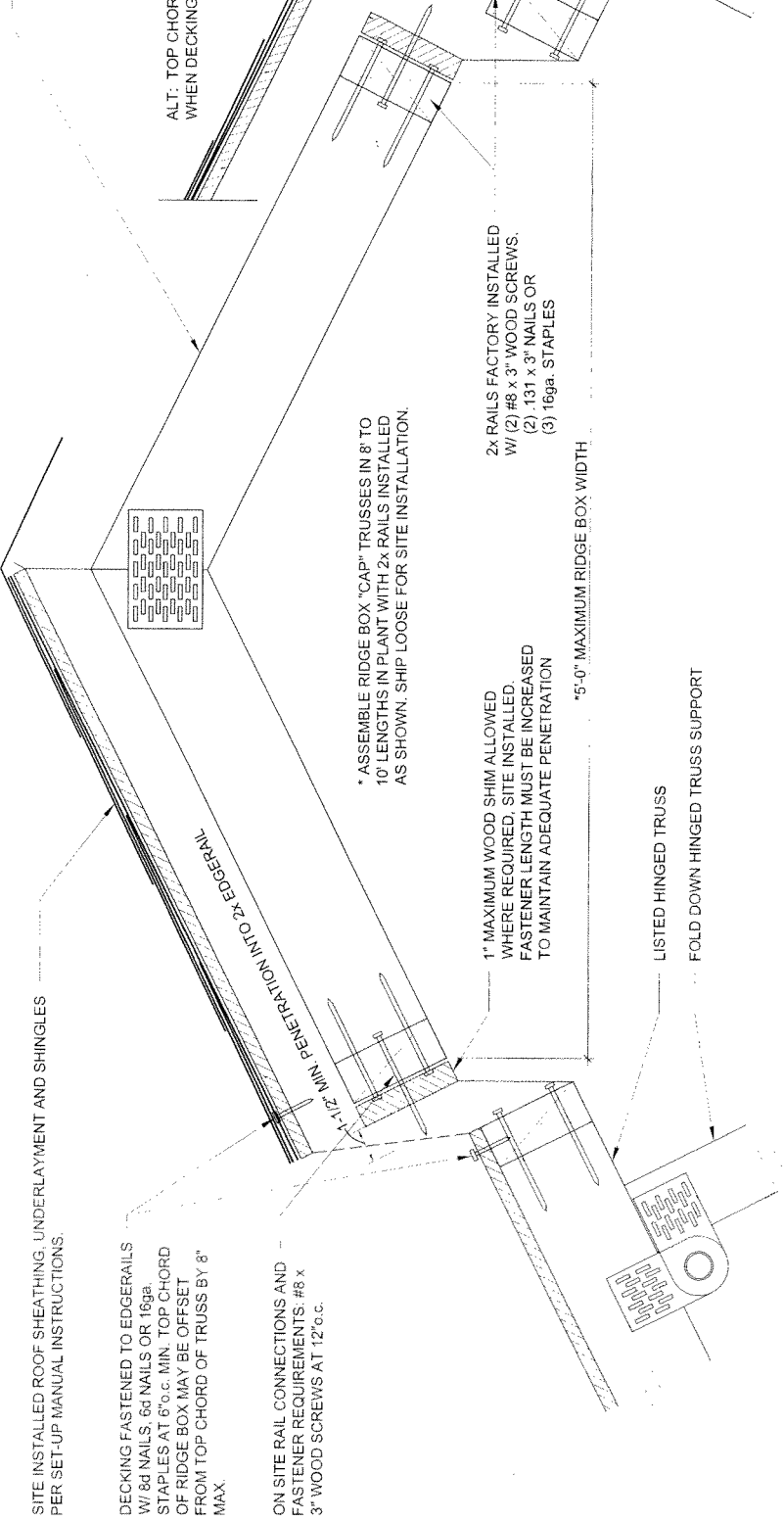
09-XX-AC XXXXXXXX. (Hinge Roof)

APPROVED DRAWINGS (3 Total)

XXXXXXX
XXXXXXX
XXXXXXX

RIDGE BOX "CAP" TRUSS
BUILT BY TRUSS MANUFACTURER
AND LISTED WITH HINGED TRUSS.

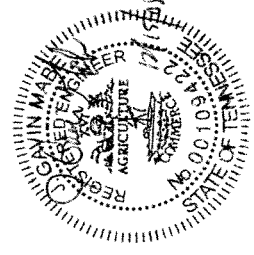
ALT. TOP CHORDS MUST ALIGN
WHEN DECKING IS LEFT SHORT



RIDGE BOX "CAP" TRUSS - INSERT APPLICATION
SCALE 3/4" = 1'

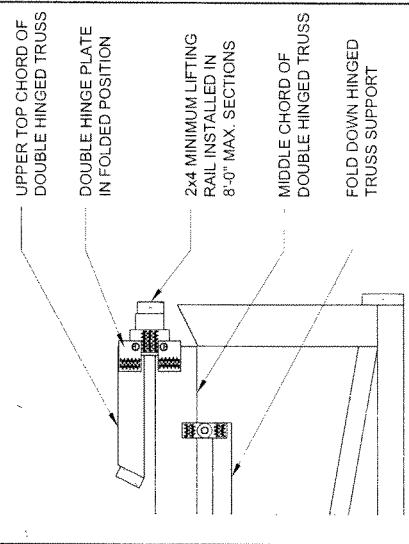
GENERAL NOTES AND DESIGN LIMITATIONS FOR RIDGE BOX:

- NO ROOF PENETRATIONS ALLOWED THROUGH HINGED PORTIONS OF ROOF.
- WIND ZONE 1 ONLY
- 30 PSF MAXIMUM ROOF LIVE LOAD WITH TRUSSES SPACED AT 24" O.C.
40 PSF MAXIMUM ROOF LIVE LOAD WITH TRUSSES SPACED AT 16" O.C.
- MINIMUM ROOF PITCH = 4/12; MAXIMUM ROOF PITCH = 7/12
- TRUSS LISTINGS SHALL INCORPORATE THE RIDGE BOX DESIGN.
- RIDGE BOX SIZE (OVERALL WIDTH) LIMIT = 5'-0" MAXIMUM.
- TRUSS BOTTOM CHORDS NOT DESIGNED FOR STORAGE LOADS OR OCCUPANCY (LIVE) LOADS.
- HOME SHALL HAVE ATTIC ACCESS PANEL IN CEILING (22" x 30" MINIMUM) TO FACILITATE INSPECTIONS.
- ALL MATERIALS REQUIRED FOR COMPLETION OF HINGED ROOF SHALL BE PROVIDED BY HOME MANUFACTURER.
- REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR COMPLETE ASSEMBLY INSTRUCTIONS AND FASTENING REQUIREMENTS.
- MAXIMUM FIELD JOINT CONNECTIONS: MAX. TENSION = 129 lbs
MAX. COMPRESSION = 297 lbs
MAX. SHEAR = 116 lbs

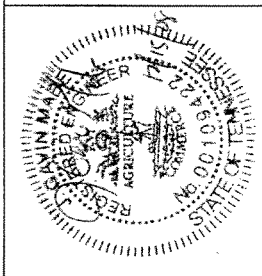


P.E. SEAL		THIRD PARTY SEAL
TITLE	RIDGE BOX "CAP" TRUSS TYPE 1	
DRAWN BY	TRW	DATE
REVIEWED BY	JSM	LAST REVISED
CHECKED BY	HMC	CALC REF
		N/A
		SHEET
		SU-D-138.0

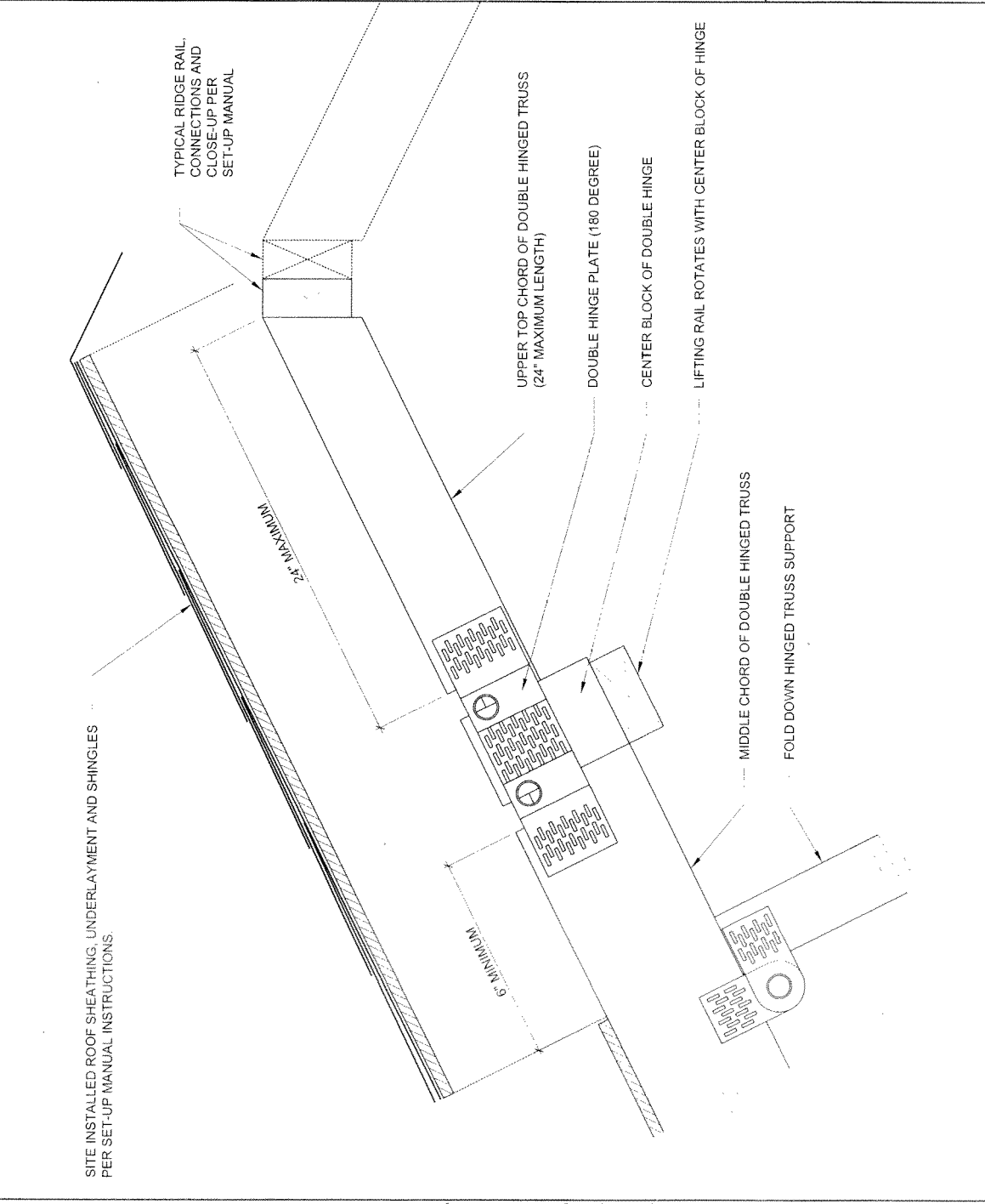
- GENERAL NOTES AND DESIGN LIMITATIONS FOR DOUBLE HINGE:**
1. NO ROOF PENETRATIONS ALLOWED THROUGH HINGED PORTIONS OF ROOF.
 2. WIND ZONE 1 ONLY.
 3. 30 PSF MAX. ROOF LIVE LOAD WITH TRUSSES SPACED AT 24" O.C.
 4. 40 PSF MAX. ROOF LIVE LOAD WITH TRUSSES SPACED AT 16" O.C.
 5. MINIMUM ROOF PITCH = 4/12; MAXIMUM ROOF PITCH = 7/12.
 6. TRUSS LISTINGS SHALL INCORPORATE THE DOUBLE HINGE PLATE ASSEMBLY.
 7. TRUSS BOTTOM CHORDS NOT DESIGNED FOR STORAGE LOADS OR OCCUPANCY (LIVE) LOADS.
 8. HOME SHALL HAVE ATTIC ACCESS PANEL IN CEILING (22" x 30" MINIMUM) TO FACILITATE INSPECTIONS.
 9. MAX LENGTH OF UPPER TOP CHORD ABOVE DOUBLE HINGE PLATE = 2'-0".
 10. ALL MATERIALS REQUIRED FOR COMPLETION OF HINGED ROOF SHALL BE PROVIDED BY HOME MANUFACTURER.
 11. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR COMPLETE ASSEMBLY INSTRUCTIONS AND FASTENING REQUIREMENTS.



DOUBLE HINGED TRUSS - SHIPPING POSITION
SCALE: 3/4"=1'



P.E. SEAL		THIRD PARTY SEAL	
TITLE: DOUBLE HINGED TRUSS RIDGE DETAIL			
DRAWN BY: TKV	DATE: 03/14/2008	CHECKED BY: HMC	CALC REF: NA
REVIEWED BY: JSM	LAST REVISED: 12/15/2008	SHEET: SU-D-138B.0	



DOUBLE HINGED TRUSS - RIDGE APPLICATION
SCALE: 3/4"=1'

ATTACHMENT D

09-XX-AC xxxxxxxx HOMES, INC. (Hinge Roof)

NOTICE TO PURCHASER

The U.S. Department of Housing and Urban Development (HUD) has issued Alternative Construction (AC) Letter No. 09-XX-AC to xxxxxxxx. (xxxxxxx) concerning this home, which was produced in a xxxxxxxx facility and finished by a licensed contractor or a similarly qualified individual.

As constructed in our manufacturing facility, this home does not comply with certain aspects of the Federal Manufactured Home Construction and Safety Standards (Standards) regarding completion of the hinged-roof system. At the home's set-up site, the hinged-roof must be raised and the ridge peak completed using methods and details for ridge cap or double hinge construction that have been accepted by HUD under this AC Letter No. 09-XX-AC.

A licensed contractor or a similarly qualified individual will accomplish all site work.

WARNING

THIS HOME HAS BEEN SHIPPED WITH THE ABOVE-MENTIONED ITEMS PARTIALLY ASSEMBLED. THESE ITEMS MUST BE COMPLETED IN ACCORDANCE WITH THE DAPIA-APPROVED MANUFACTURER'S INSTRUCTIONS.

HUD evaluated this AC concept and concludes that it provides levels of quality, durability, and safety that are equivalent to those required by the Federal Standards. To comply with the approval letter issued to xxxxxxxx, the letters "AC" must appear in your home's serial number.

For additional information about the specific Federal Standards involved, a copy of the HUD letter issued to xxxxxxxx pursuant to 24 CFR 3282.14(b) is available on request from your retailer or xxxxxxxx.

Copy to Home Purchaser or placed next to the Health Notice on formaldehyde emissions

ATTACHMENT E - 09-XX-AC XXXXXXXX (Hinge Roof)

QUALITY CONTROL CHECKLIST

For Homes with Site Completed Roof Ridge Assembly

Serial Number _____

Model Number _____

XXXXXXX's Quality Control personnel will complete the following checklist for units built under this Alternative Construction (AC) before a home is shipped.

YES NO

1. The letters "AC" are included in the home's serial number in all locations the serial number occurs, including the serial number stamped on the front cross member, and on all required paperwork.
2. The following Notice is affixed to the front cover of the DAPIA-approved XXXXXXXX Installation Manual:

NOTICE

Portions of the roof assembly, including the hinged-roof, ridge peak assembly have been shipped loose and must be installed on site. Check to ensure that the roof is properly installed according to the DAPIA-approved roof installation instructions. Failure to follow these instructions will result in an inadequate roof assembly and substantial damage to the home.

3. The applicable DAPIA-approved supplemental roof assembly installation details, including step-by-step instructions for completion of hinged roof truss installation, must be attached to the rear flap of the DAPIA-approved XXXXXXXX Installation Manual
4. The roof ridge assembly has been manufactured in accordance with the DAPIA-approved framing plans and is provided with the home.
5. All material necessary to complete and finish installation of the roof system, roof covering, roof ventilation, gable end walls, exterior siding and insulation are provided with the home.
6. Unfinished roof portions are covered and sealed with 5-mil plastic or other DAPIA-approved material.
7. DAPIA-approved access panel(s) of at least 14.5" by 22" has been provided for on-site inspection of roof ridge interconnections after close-up.
8. A Notice to Purchaser (Attachment D) has been included in the set-up manual documents.
9. A completed copy of this QC checklist has been placed in this home's file as part of the permanent QC records.

CHECKED BY: _____

Signature (QC Personnel)

_____ Date

Copy to plant's home file(s)

