



Manufactured Housing Association for Regulatory Reform

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May 7, 2012

VIA FEDERAL EXPRESS

Mr. Ronald Y. Spraker
Acting General Deputy Assistant Secretary for Housing-
Acting Deputy Federal Housing Commissioner
U.S. Department of Housing and Urban Development
451 7th Street, S.W.
Washington, D.C. 20410

Re: Changes in Southern Yellow Pine Design Values

Dear Mr. Spraker:

The Manufactured Housing Association for Regulatory Reform (MHARR) is a Washington, D.C.-based national trade association representing the views and interests of producers of manufactured housing regulated by the Department of Housing and Urban Development pursuant to the National Manufactured Housing Construction and Safety Standards Act of 1974 (Act), as amended by the Manufactured Housing Improvement Act of 2000 (2000 law).

We have been provided with a copy of your April 26, 2012 letter to PFS Corporation (copy attached) regarding a March 2012 Addendum to the National Design Specification Design Values for Wood Construction (NDS Addendum). Your letter unilaterally declares that the new design values set forth in the NDS Addendum will become part of the HUD Manufactured Home Construction and Safety Standards (MHCSS) as of June 1, 2012. This action, however, is contrary to applicable law and raises serious questions as to the management of the federal manufactured housing program.

As you may know, the wood products addressed by the NDS Addendum are used extensively in the production of HUD Code manufactured homes, especially in the construction of roof trusses. The NDS Addendum makes major – and arguably extreme – changes to design values that have been in place for an extended period and form the basis for a large number of approved manufactured home designs.

Regardless of the decisions reflected in the NDS Addendum, the Act, as amended by the 2000 law, establishes an orderly, accountable and transparent consensus-based process for the consideration and adoption of all new or amended MHCSS standards. That procedure includes

consensus review by the Manufactured Housing Consensus Committee (MHCC) to ensure, among other things, that any such change is justified and cost-effective, an MHCC recommendation to the Secretary and notice and comment rulemaking prior to final approval by the Secretary via an "order." Significantly, the law makes no distinction between standards developed by HUD and/or the MHCC, or standards developed by third-parties, including reference standards. As a result, there is no valid statutory basis for your unilateral decision and this entire matter should be referred to the MHCC for consensus review prior to any further administrative action by HUD.

Furthermore, to comply with the new standard created by the Addendum, manufacturers would need to re-test, re-evaluate and modify all affected home designs. Each such design would then need to be re-certified by the manufacturer's Design Approval Primary Inspection Agency (DAPIA) before a manufacturer could even begin production based on those new designs. According to the information provided to us, it would conservatively take at least six months to a year for a manufacturer to complete this process in accordance with the relevant regulations, yet you state that the Addendum will become a mandatory part of the manufactured housing standards as of June 1, 2012, leaving manufacturers and DAPIAs less than one month to complete this detailed process, while subjecting manufacturers, retailers and PIAs to enforcement action and sanctions – including potential criminal penalties -- if homes do not comply with the Addendum values on that date. This is not nearly enough time for an orderly transition to new designs throughout the entire industry and insofar as your decision would violate section 604(c) of the Act, prohibiting any new standard from taking effect less than 180 days after adoption, the effective date, of any such standard, at a minimum, must be extended by at least six months.

The NDS Addendum entails major changes to the designs of HUD Code homes. Compliance with those changes will take substantially more time than is provided by your letter and those changes, moreover, are fully subject to the requirements of the 2000 law. Accordingly, we request that you defer any implementation of these design changes pending MHCC review and compliance with all applicable procedural and rulemaking requirements.

Sincerely,

A handwritten signature in black ink, appearing to read "Danny D. Ghorbani", written in a cursive style.

Danny D. Ghorbani
President

cc: Hon. Carol J. Galante
Mr. Henry S. Czauski
Mr. Mathew J. Scire (GAO)
MHARR Manufacturers



ASSISTANT SECRETARY FOR HOUSING-
FEDERAL HOUSING COMMISSIONER

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

APR 30 2012

APR 26 2012

Matthew Weidner, P.E., S.E.
Technical Director
PFS Corporation
1507 Matt Pass
Cottage Grove, WI 53527

RE: Changes in Southern Pine Design Values

Dear Mr. Weidner:

Thank you for your letter of February 16, 2012, and supporting materials concerning certain upcoming changes issued by the Southern Pine Inspection Bureau (SPIB) in Southern Pine design stress values in Supplement No. 9 that will become effective on June 1, 2012. Specifically, you have asked how this may affect the design of homes manufactured under the HUD code and whether these changes automatically become part of the Manufactured Home Construction and Safety Standards.

In response to your first question, these changes will affect the allowable design stresses for certain Southern Pine lumber sizes and grades and the provisions of § 3280.303(f), Allowable design stress, would be applicable under these circumstances. That section states in part that:

“(f) Allowable design stress. The design stresses of all materials shall conform to acceptable engineering practice. (emphasis supplied). . .”

Because it would not be consistent with accepted engineering practice to continue to use higher design stresses when lower design stresses have been published and are known for a specific material, the lower design values in Supplement No. 9 need to be followed for member sizes of visually graded Southern Pine of 2”x 2” to 4” x 4” upon the effective date of June 1, 2012.

As for your second question, these lower design values will become part of the Manufactured Housing Construction and Safety Standards on June 1, 2012, as an addendum to the National Design Specification (NDS) for Wood Construction which has been issued that includes the 2001 edition of the NDS which is incorporated by reference in § 3280.304 of the Standards. A copy of that addendum is enclosed.

By copy of this letter, all Primary Inspection Agencies are being notified of this determination and are being provided with copies of the attachments that were provided with your letter.

Please contact Rick Mendlen of this office at (202) 402-5608 if you have any further questions regarding this issue.

Sincerely,



Ronald Y. Spraker
Acting General Deputy Assistant Secretary
for Housing – Acting Deputy Federal Housing
Commissioner

Enclosures



ADDENDUM

**to the 2012 and previous versions of the
Design Values for Wood Construction**

(a supplement to the National Design Specification® (NDS®) for Wood Construction)

Effective June 1, 2012, design values for No. 2 Dense and lower grades of visually-graded Southern Pine and No. 2 and lower grades of visually-graded Mixed Southern Pine lumber, 2" - 4" thick, 2" - 4" wide, will change. The design values to use with the 2012 NDS, 2005 NDS, and the 2001 NDS are shown below (values that will change on June 1, 2012 are shown as underlined):

Table 4B Reference Design Values for Visually Graded Southern Pine Dimension Lumber (2" - 4" thick)^{1,2,3,4,5} (Tabulated design values are for normal load duration and dry service conditions, unless specified otherwise. See NDS 4.3 for a comprehensive description of design value adjustment factors.)

USE WITH TABLE 4B ADJUSTMENT FACTORS

Species and commercial grade	Size classification	Design values in pounds per square inch (psi)							Specific Gravity ⁶	Grading Rules Agency
		Bending	Tension parallel to grain	Shear parallel to grain	Compression perpendicular to grain	Compression parallel to grain	Modulus of Elasticity			
		F _b	F _t	F _v	F _{c⊥}	F _c	E	E _{min}		
SOUTHERN PINE										
No.2 Dense	2" - 4" wide	<u>1,150</u>	<u>750</u>	175	680	<u>1,250</u>	<u>1,500,000</u>	<u>550,000</u>	0.55	SPIB
No.2		<u>1,050</u>	<u>650</u>	175	565	<u>1,100</u>	<u>1,400,000</u>	<u>510,000</u>		
No.2 Non-Dense		<u>975</u>	<u>575</u>	175	460	<u>1,050</u>	<u>1,200,000</u>	<u>440,000</u>		
No.3 and Stud	4" wide	<u>800</u>	<u>375</u>	175	565	<u>625</u>	<u>1,200,000</u>	<u>440,000</u>	0.55	SPIB
Construction		<u>800</u>	<u>500</u>	175	565	<u>1,150</u>	<u>1,300,000</u>	<u>470,000</u>		
Standard		<u>450</u>	<u>275</u>	175	565	<u>950</u>	<u>1,200,000</u>	<u>440,000</u>		
Utility		<u>200</u>	<u>125</u>	175	565	<u>625</u>	<u>1,100,000</u>	<u>400,000</u>		
MIXED SOUTHERN PINE										
No.2	2" - 4" wide	<u>1,050</u>	<u>650</u>	175	585	<u>1,100</u>	1,400,000	510,000	0.51	SPIB
No.3 and Stud		<u>800</u>	<u>375</u>	175	585	<u>625</u>	1,200,000	440,000		
Construction	4" wide	<u>800</u>	<u>500</u>	175	565	<u>1,150</u>	1,300,000	470,000	0.51	SPIB
Standard		<u>450</u>	<u>275</u>	175	565	<u>950</u>	1,200,000	440,000		
Utility		<u>200</u>	<u>125</u>	175	565	<u>625</u>	1,100,000	400,000		

- LUMBER DIMENSIONS.** Tabulated design values are applicable to lumber that will be used under dry conditions such as in most covered structures. For 2" to 4" thick lumber the DRY dressed sizes shall be used (see Table 1A) regardless of the moisture content at the time of manufacture or use. In calculating design values, the natural gain in strength and stiffness that occurs as lumber dries has been taken into consideration as well as the reduction in size that occurs when unseasoned lumber shrinks. The gain in load carrying capacity due to increased strength and stiffness resulting from drying more than offsets the design effect of size reductions due to shrinkage.
- STRESS-RATED BOARDS.** Information for various grades of Southern Pine stress-rated boards of nominal 1", 1 1/4", and 1 1/2" thickness, 2" and wider is available from the Southern Pine Inspection Bureau (SPIB) in the *Standard Grading Rules for Southern Pine Lumber*.
- SPRUCE PINE.** To obtain recommended design values for Spruce Pine graded to SPIB rules, multiply the appropriate design values for Mixed Southern Pine by the corresponding conversion factor shown below and round to the nearest 100,000 psi for E; to the nearest 10,000 psi for E_{min}; to the next lower multiple of 5 psi for F_v and F_{c⊥}; to the next lower multiple of 50 psi for F_b, F_t, and F_c if 1,000 psi or greater, 25 psi otherwise.

CONVERSION FACTORS FOR DETERMINING DESIGN VALUES FOR SPRUCE PINE

Conversion Factor	Bending	Tension parallel to grain	Shear parallel to grain	Compression perpendicular to grain	Compression parallel to grain	Modulus of Elasticity
	F _b	F _t	F _v	F _{c⊥}	F _c	E and E _{min}
		0.78	0.78	0.98	0.73	0.78

- SIZE FACTOR.** For sizes wider than 12", use size factors for F_b, F_t, and F_c specified for the 12" width. Use 100% of the F_v, F_{c⊥}, E, and E_{min} specified for the 12" width.
- When individual species or species groups are combined, the design values to be used for the combination shall be the lowest design values for each individual species or species group for each design property.
- Specific gravity, G, based on weight and volume when oven-dry.