

**Oregon Energy Code
Interpretive Ruling No. 92-1
APPLICATION OF TABLE 53-P TO ADDITIONS**

Initiated By: ALAN SEYMOUR
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QUESTIONS CONSIDERED

This ruling deals with Table 53-P, Prescriptive Compliance Paths for Residential Buildings in Chapter 53 of the Oregon Structural Specialty Code (OSSC) and One and Two Family Dwelling Specialty Code (1 & 2 FDSC).

1. Can additions to Group R structures, three stories and less, that are submitted for plan review after January 1, 1992, be constructed under any Table 53-P sun-tempered prescriptive compliance path where the additions separately meet the requirements of the respective paths?
2. Will the construction of additions to Group R, three stories and less, submitted for plan review after January 1, 1992, be allowed under Table 53-P, Prescriptive Path 8 requirements if the total area of the addition and the house exceeds 1,500 square feet?

APPLICABLE CODE SECTION (Effective January 1, 1992)

Table 53-P—Prescriptive Compliance Paths for Residential Buildings

**TABLE NO. 53-P
PRESCRIPTIVE COMPLIANCE PATHS FOR RESIDENTIAL BUILDINGS^{1, 2, 3}**

Building Components	PATH 1	PATH 2 Sun Tempered ⁴	PATH 3	PATH 4 Sun Tempered ⁴	PATH 5	PATH 6 Sun Tempered ⁴	PATH 7 Sun Tempered ⁴	PATH 8 House Size Limited ⁵	PATH 9 Log Homes/ Solid Timber
Maximum Allowable Window Area ⁶	No Limit	No Limit	No Limit	No Limit	No Limit	No Limit	No Limit	12%	No Limit
Window Class ⁷	U=0.40	U=0.40	U=0.50	U=0.50	U=0.60	U=0.60	U=0.60	U=0.40	U=0.40
Doors, Other Than Main Entry	U=0.20	U=0.20	U=0.20	U=0.20	U=0.20	U=0.20	U=0.20	U=0.20	U=0.54
Main Entry Door, maximum 24 sq. ft.	U=0.54	U=0.54	U=0.20	U=0.20	U=0.20	U=0.20	U=0.20	U=0.20	U=0.54
Wall Insulation ⁸	R-21 ⁹	R-15	R-21A	R-15A	R-24A	R-21A	R-21A	R-15	— ³
Underfloor Insulation	R-25	R-21	R-25	R-21	R-30	R-21	R-25	R-21	R-30
Flat Ceilings ⁸	R-38	R-49	R-49A	R-38	R-49A	R-49A	R-49A	R-49	R-49
Vaulted Ceilings ^{10, 11}	R-30	R-30	R-30	R-38	R-38	R-38	R-38	R-38	R-38
Skylight Class ⁷	U=0.50	U=0.50	U=0.50	U=0.50	U=0.50	U=0.50	U=0.50	U=0.50	U=0.50
Skylight Area	<2%	<2%	<2%	<2%	<2%	<2%	<2%	<2%	<2%
Basement Walls	R-21	R-21	R-21	R-21	R-21	R-21	R-21	R-21	R-21
Slab Floor Edge Insulation	R-15	R-15	R-15	R-15	R-15	R-15	R-15	R-15	R-15
Forced Air Duct Insulation	R-8	R-8	R-8	R-8	R-8	R-8	R-8	R-8	R-8

⁴The sun-tempered house shall have one lot line which borders on a street oriented within 30 degrees of true east-west (a bearing angle between 130° to 190° magnetic), and 50 percent or more of the total glazing area for the heated space on the south elevation.

⁵Path 8 applies only to homes with less than 1,500 sq. ft. heated floor space AND glazing area less than 12 percent of heated space floor area.

BACKGROUND

The different paths in Table 53-P describe prescriptive measures for constructing and insulating a house. For sun-tempered paths, 50 percent or more of the glazing area for the heated space (on the entire house) must be installed on the south elevation.

Prescriptive Compliance Path 8 was created as a compromise for entry level housing in order to keep costs more affordable.

FINDINGS

1. Additions Constructed to the Sun-tempered Paths

- Additions which separately meet the requirements of the different sun-tempered paths will perform as well as an entire structure built to the same requirements. In most cases, even with the sun-tempered credit, the structures will perform better than the existing house because the addition will conserve more energy.
- There was no intent to restrict additions under the sun-tempered paths by requiring the glazing on the entire house to meet the glazing orientation requirement.

2. Additions Constructed to Prescriptive Path 8

- Prescriptive Compliance Path 8 was created as a compromise for small entry level housing in order to keep costs more affordable. Allowing Path 8 to be applied to a house in excess of 1,500 square feet defeats the purpose of the compromise. This path did not intend to allow the size of the house, with addition included, in excess of 1,500 square feet.
- The addition could be constructed to Path 8 if both the house and addition's square footage total does not exceed 1,500 square feet.

This interpretation is authorized by ORS 455.060, Rulings on Acceptability of Materials, Designs or Methods of Construction and Attorney General's Opinion OP-5208 issued October 1, 1981, which advised that the statute is designed to permit authoritative interpretations of existing code requirements.

CONCLUSION

1. Additions Constructed to the Sun-tempered Prescriptive Paths

- Additions independently complying with all the requirements of a sun-tempered prescriptive compliance path (Paths 2, 4, 6 and 7) of Table 53-P may be built onto existing residential structures.
- The requirements of the sun-tempered paths may be applied to only the addition. The structure must be located on a lot which is properly oriented, as described in Footnote 4 of Table 53-P, or be designed and accepted by the building official as having solar access. At least 50 percent of the total glazing on the addition must be on the south elevation of the addition.

2. Additions Constructed to Prescriptive Path 8

- Additions may only be constructed to the requirements of Prescriptive Path 8 when the combined area of the existing house and addition do not exceed 1,500 square feet.

The Energy Conservation Board and Structural Code Advisory Board make these recommendations as interpretations to the requirements in Chapter 53, Energy Conservation.

(signed February 10, 1992)
Rodger Bekooy, Chairman
Energy Conservation Board

Date

(Signed February 18, 1992)
John Talbott, Chairman
Structural Code Advisory Board

Date

The recommendations and findings of the Energy Conservation Board and Structural Code Advisory Board are accepted and the interpretations are adopted as stated above.

(signed February 21, 1992)
Gary J. Wicks, Administrator
Building Codes Agency

Date

