

2021 NEW MEXICO RESIDENTIAL ENERGY CONSERVATION CODE

PASSIVE SOLAR HEATING WORKSHEET

Project ID		Building Floor Area		Date	
Builder Name					
Builder Address					
Submitted by					
Building Address					
Town					
	Climate Zone (3-7)				

Items meeting the listed criteria may be presented for simplified code compliance as solar features. All boxes by the system type definitions must be checked to certify compliance. The area in square feet of such features should be entered here and on the Tradeoff Worksheet under Doors and Windows. The U-Factor column may be left blank on the Tradeoff Worksheet for these solar features. Solar feature glazings are not required to meet the specified SHGC requirements stated on the Tradeoff Worksheet and the 2021 NMECC. In addition, modified U-Factors for Direct Gain glazing is acceptable in CZ 3-6 (see Direct Gain checklist).

All Solar Features

Orientation within 25° east and 15° west degrees of true South.	
No significant obstructions to sun above 25° elevation, from bottom of feature.	
No significant obstructions to sun within 45° horizontal from the east and west edges of the solar feature.	
Solar features of all kinds no greater than 20% of heated floor area.	
N + E + W windows meet all requirements of the Tradeoff Worksheet and the 2021 NMECC.	
For CZ 3, overhangs or other external attached fixtures that prevent sun on south-facing glazing on April 21st.	
For CZ 4, overhangs or other external attached fixtures that prevent sun on south-facing glazing on May 1st.	
For CZ 5, overhangs or other external attached fixtures that prevent sun on south-facing glazing on May 15th.	
For CZ 6, overhangs or other external attached fixtures that prevent sun on south-facing glazing on May 31st.	

Direct Gain

Double glazed (minimum) with a U-Factor ≤ 0.40 for CZ 3 or 4, or a U-Factor ≤ 0.32 for CZ 5 or 6.	
For wood frame or non-mass built homes, if South windows greater than 8% of heated floor area, add thermal mass (at least 5x area of South glazing, at least 3" thick)	
TOTAL AREA DIRECT GAIN GLAZING	ft ²

Solar Mass Walls

Solid masonry wall, no vents.	
TOTAL AREA MASS WALL GLAZING	ft ²

Attached Sunspace

Double glazed (minimum) with a U-Factor ≤ 0.40 for CZ 3 or 4, or a U-Factor ≤ 0.32 for CZ 5 or 6.	
Mass area at least 3x glazing area (a 4" concrete slab floor may count toward this requirement).	
Operable windows or doors to living space, at least 15% of sunspace glazing area.	
TOTAL AREA SUN SPACE GLAZING	ft ²

Note: This applications manual is not a solar heating design guide. The inclusion of solar features meeting the above definitions does not guarantee correct solar heating performance for a building design. For example, solar features totaling 20% of heated floor area, while allowed by this manual, may be excessive in many applications. Passive solar heating features should be designed using appropriate design tools.