



TECHNICAL BULLETIN

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

B-30X

2550 Ventura Avenue, Santa Rosa, CA 95403
(707) 565-1900 FAX (707) 565-1103

Residential Occupancy Separation in Flood Zone Areas

INTRODUCTION

The California Building Code requires a one-hour occupancy separation between the Group R-3 and Group U-1 occupancies. The separation is limited to the installation of materials approved for one-hour resistive construction of the garage side only. Flood Prevention Regulations of the Sonoma County Code Chapter 7-B require the elevation of the lowest floor one foot above the 100 Year Base Flood Elevation (BFE). Vehicle storage is permitted below the BFE. To minimize silt build up and related dry rot problems enclosed wall cavities and enclosed floor/ceiling assemblies are not permitted below the BFE. The ceiling membrane should be above the BFE to ensure it is not damaged by moisture and to keep water and silt from the space.

TECHNICAL DETAILS

Where fire protection of a bearing wall in a garage is required below the BFE alternative protection methods are required. This generally will include post and beam supports for the horizontal occupancy separation. The following has been approved as alternative methods providing equivalent protection for post and beam members:

- I. Individually protected by wrapping with lath and cement plaster.
- II. May be protected without wrapping if they are sized in accordance with heavy timber provisions of the code.
- III. May be increased a nominal two inch dimension over that required for structural considerations without added fire protection.

GLOSSARY

Occupancy separation: A fire resistive separation between each occupancy either vertical, horizontal, or both, or when necessary of such other form as may be required to afford a complete separation between the various occupancy divisions in the building. Where the occupancy separation is horizontal, structural members supporting the separation shall be protected by equivalent fire-resistive construction.

REFERENCES

2001 California Building Code Sections 302.4, 605, 605.6
Sonoma County Residential Construction Handbook Section 19
