

**SANTA CRUZ COUNTY PLANNING DEPARTMENT POLICY/ORDINANCE
INTERPRETATION**

Interpretation No.: FLOOD ZONES – SUBSTANTIAL IMPROVEMENTS (Flood Zones –
How is “Substantial Improvement” calculated?)
Effective Date: 02/22/10
Revised:

Question

How is “substantial improvement” calculated for projects in the flood zones?

Applicable Regulatory Section(s)

§16.10.040(3m)

§16.10.070(f)3

INTERPRETATION:

Substantial improvement is calculated by dividing the “cost of improvements” being proposed by the “market value” of the structure.

Cost of Improvements

Attachment 1 shows the costs of improvements per square foot of construction based upon the type of structure, the type of construction, and the Flood Zone designation.

For partial construction projects, the cost of improvements per square foot is based upon a percentage of the costs of improvements shown in Attachment 1. The percentage assigned to the cost of improvements for various partial construction projects is shown in Attachment 2 (one-story structures) and Attachment 3 (two-story structures). For example, the cost of improvement for a foundation replacement only on a 1-story structure in the A-Zone would be \$200 per square foot x 15% = \$30 per square foot.

For partial construction projects that are not included in Attachments 2 and 3 (such as replacing windows, remodeling a kitchen, etc.), the property owner must submit a detailed cost estimate from a licensed contractor for review.

Per FEMA requirements, detailed cost estimates must include labor and material costs for the following items as well as overhead and profit:

- Structural elements:
 - Materials (footings, slabs walls, floors, ceilings, decks and porches, exterior finishes, windows and doors, roofing, hardware)
- Interior finishing elements:
 - Tiling, linoleum, stone or carpet over subflooring; wall finishes; cabinets; built in bookcases, cabinets and furniture
- Utility and service equipment
 - HVAC equipment; plumbing and electrical services, light fixtures and ceiling fans; security systems; built in kitchen appliances; central vacuum systems; water filtration, conditioning or recirculation systems
- Costs to demolish storm damaged building components

- Labor and other costs associated with moving or altering undamaged building components to accommodate improvements or additions

Calculations of the cost of construction must also take into consideration cumulative improvements to the structure over the course of five (5) consecutive years.

Projects that do not require permits are not subject to substantial improvement requirements unless they are part of a larger project that requires a permit.

Market Value

- New Construction (including additions, remodels, etc.)

The “market value” of a structure is based upon an independent appraisal by a professional appraiser. The appraisal must exclude the value of the land and other detached structures. The appraisal should also exclude landscaping, sidewalks, fences, yard lights, swimming pools, screened pool enclosures, and landscape irrigation systems.

A property owner may elect to use the current assessed value of their property based upon the County Assessor’s records to determine the market value. However, the property owner should be aware that this may be an overly restrictive value.

- As-built Work

When an application is submitted to recognize work to a structure completed without benefit of a permit (“as-built”), an appraisal of the structure in its current condition is required, unless the structure was appraised within 90 days prior to the work being done. The cost of improvements is then subtracted from the appraised value to obtain the pre-improvement value of the structure. As-built projects may require review on a case-by-case basis, but in general the procedures for as-built projects should include the following steps:

1. The property owner submits the Assessor’s records of the property.
2. County Planning staff reviews County records and determines what portion of the structure is permitted. Portions of the structure constructed without permits are subtracted from the appraised “market value” of the structure.
3. The property owner submits plans showing the structure’s pre-existing configuration and portions of the structure that were altered, replaced or newly constructed. An estimate by a building inspector of the amount and type of work performed (percent remodel, percent new construction, etc.) may be required.
4. Planning staff calculates the cost of improvements based upon the estimate of the work performed, the costs of improvements per square foot, and comparison to the Assessor’s records.

Reason:

County Code Section 16.10.040(3m) defines “substantial improvement” as “any repair, reconstruction, rehabilitation, addition, alteration or improvement to a structure, or the cumulative total of such activities as defined in Section [16.10.040\(r\)](#), the cost of which equals or exceeds 50 percent of the market value of the structure either immediately prior to the issuance of the building permit.”

The cost of improvements per square foot as shown in Attachment 1 is based upon research of actual building costs in the County, appraisals, and costs per square foot used by other jurisdictions. These values should be evaluated every few years and the table updated accordingly.

Since the costs of improvements are based upon the quality of the materials, finishing and equipment, and since projects in the “V Zone” are generally of higher quality, more expensive construction than projects in the “A Zone”, a higher construction cost is assigned to projects in the “V Zone”.

Per FEMA, “market value” means the value of the structure prior to the proposed improvements. FEMA also allows this value to be based upon an independent appraisal by a professional appraiser.

Tom Burns, Planning Director

Date

Square Foot Construction Costs
For use in calculation of substantial improvement

Group	Description	FEMA A Zone		FEMA V Zone	
		(100-year floodplain)		(Wave run-up zone)	
		Type of Construction		Type of Construction	
		VA	VB	VA	VB
A-1	Assembly, theaters, with stage	318.27	306.56	477.40	459.84
	Assembly, theaters, without stage	279.77	268.06	419.65	402.09
A-2	Assembly, nightclubs	242.92	234.74	364.38	352.11
A-2	Assembly, restaurants, bars, banquet halls	238.79	232.68	358.18	349.01
A-3	Assembly, churches	286.21	274.50	429.32	411.75
A-3	Assembly, general, community halls, libraries, museums	225.90	216.23	338.85	324.35
A-4	Assembly, arenas	275.64	265.99	413.46	398.99
B	Business	224.46	215.22	336.68	322.83
E	Educational	257.23	247.53	385.85	371.29
F-1	Factory and industrial, moderate hazard	123.14	116.51	184.72	174.77
F-2	Factory and industrial, low hazard	123.14	114.45	184.72	171.67
H-1	High Hazard explosives	113.54	-	170.31	-
H234	High Hazard	113.54	104.84	170.31	157.27
H-5	HPM	224.46	215.22	336.68	322.83
I-1	Institutional, supervised environment	242.14	232.66	363.20	348.98
I-2	Institutional, hospitals	439.45	-	659.18	-
I-2	Institutional, nursing homes	281.32	-	421.98	-
I-3	Institutional, restrained	274.34	260.97	411.50	391.46
I-4	Institutional, day care facilities	242.14	232.66	363.20	348.98
M	Mercantile	161.81	155.70	242.71	233.54
R-1	Residential, hotels	245.73	236.23	368.59	354.34
R-2	Residential, multiple family	193.99	184.49	290.98	276.73
R-3	Residential, one- and two- family	212.17	200.00	318.25	300.00
R-4	Residential, care / assisted living facilities	242.14	232.66	363.20	348.98
S-1	Storage, moderate hazard	109.41	102.78	164.11	154.17
S-2	Storage, low hazard	109.41	100.71	164.11	151.07
U	Utility, miscellaneous	81.85	77.91	122.78	116.86

Notes: Private Garages use Utility, miscellaneous
 Unfinished basements (all use group) = \$30.98 per sq. ft.
 For shell-only buildings deduct 20%
 See Chapter 6 of the 2007 CBC for definition of Type VA and VB Construction