

Owners v. ABC Construction, et al.
 1 Home Road, Carmel Valley
Claims of Construction Deficiencies

July 2, 1999

Section II of V

Page 1 of 78

Field Name	Description
MFC #:	This is our claim designation.
Issue:	In this field we very briefly identify the claim. Generally, we name three types of claims: design deficiencies, "as built" construction deficiencies and resultant damages.
Claim:	Here we elaborate further on the nature of each issue. These comments are our team's site inspection observations, including applicable building code citations, plan or design requirements and industry standards.
Room/Area:	This is the general location where the claimed deficiencies were observed.
MFC Repair:	This field contains our suggested scope of repair.
Apportionment to Repair:	This is the total claimed costs to repair, before apportionment.
Section IV Reference:	Here we briefly state what parts of Section IV were used to arrive at the figure we assign here. Due to the complexity of the estimate, we cannot provide line item-by-line item references in this report.
Comments on ABC Responsibility:	In this field we submit our opinion on to what extent ABC Construction is responsible for the observed deficiencies and/or damages. For the purposes of this report, we have not distinguished between ABC Construction and its subcontractors in terms of allocation of responsibility.
% to ABC:	This is the percentage we have, at this time, allocated to ABC for this issue.
Comments on Architect Responsibility:	In this field we submit our opinion on to what extent Guy Frank-Alvarez is responsible for the observed deficiencies and/or damages. For the purposes of this report, we have not distinguished between Guy Frank-Alvarez and other design team members in terms of allocation of responsibility.
% to AIA:	This is the percentage we have, at this time, allocated to Frank-Alvarez for this issue.
Allow to ABC:	This is an apportioned amount to ABC, calculated as follows: Apportionment to Repair x % to ABC.
Allow to AIA:	This is an apportioned amount to Guy Frank-Alvarez, calculated as follows: Apportionment to Repair x % to AIA.

Field Name	Description
<p>Apportionment to Repair:</p>	<p>This is the extrapolated total cost to repair for each claim.</p> <p>We have made cost apportionment decisions at each claim based on related line items in the Section IV detailed estimate. To the total of the line items we add a mark up of 75% based on General Conditions, Design, Move Out, Overhead & Profit and Contingency. Some claim figures include apportionment of the Work Completed costs. Work Completed costs are marked up 23% for Design and Move Out soft costs only.</p> <p>The claim total for MFC#2 was calculated in a different manner- as explained at that Claim.</p> <p>We understand that others may, due to assembly overlap and other complexities of the issues, view these cost apportionments differently. Some specific comments are included in the next field.</p>

Please see Section IV for Detailed Estimated Costs & Repair Scope.

Owners v. ABC Construction, et al. - Claims of Construction Deficiencies
Section II of V - Summary of Claims

July 2, 1999

Page 3 of 78

MFC #	Issue	Room/Area
1	Design & Architectural Oversight	Design
2	Seismic Deficiencies	Design
2.1	Seismic Deficiencies	Design
3	Settlement & Cracking at Driveway	Driveway
4	Inadequate Retaining Wall Drainage	Retaining Walls
5	Improper Foundation Drainage	Foundation
6	Termite Intrusion	Framing
7	Nonfunctional Water Barrier Between Wood Frame & Grade	Foundation
8	Stucco Deficiencies	Exterior
9	Framing Issues	Framing
10	Insufficient Under Floor Ventilation	Sub Area
11	Insufficient Rain Water Leader System	Site Drainage
12	Improper Downspout & Gutter Repairs	Front Elevation/Roof
13	Improper Flashings/Stucco/Gutter Terminations	Garage - Upper
14	Failed Solder at Double Fascia Copper Flashings	Garage - Upper
15	Double Fascia Design Deficiencies	Garage - Upper
16	Garage Wall and Ply Substrate Water Damage	Garage
17	Failed Roof/Skylight Watertightness	Skylights/Roof
18	Improper Roof Slopes	Entry Cascading Roof
19	Inadequate Waterproofing/Flashings/Weepscreed Clearance at Patio Walls	Patio Walls
20	Inadequate Waterproofing/Flashings at Trellis Posts	Trellises
21	Inadequate Waterproofing/Flashings at Spa Patio	Spa Patio
22	Inadequate Waterproofing/Flashings at Central Patio	Central Patio
23	Inadequate Waterproofing/Flashings at Kitchen Patio	Kitchen Patio
24	Inadequate Waterproofing/Flashings at Family Room Patio	Family Room Patio
25	Discontinuous Sealant @ Window & Door Stops	Throughout - Windows & Doors
26	Water Intrusion @ Window & Door Jambs	Throughout - Windows
27	Inadequate Waterproofing/Flashings at Door Thresholds	Throughout- Thresholds
28	Planters Contacting Wood Frame	Planters
29	Poor Quality Improper Materials @ Exterior "Cabinetry"	Exterior
30	Lower Level Patio Higher Than Interior	Lower Level Patio
31	Exterior Electrical Deficiencies	Electrical @ Exterior
32	Misc. Interior Electrical Deficiencies	Electrical @ Interior
33	Improper Gas Vent Location	Mechanical @ Exterior

MFC #	Issue	Room/Area
34	Radiant Heating Deficiencies	Mechanical @ Interior
35	Unsupported Gas Piping	Sub Area
36	Hardwood Flooring Damage	Floors
37	Plaster Finish Moisture Damage	Throughout - Walls & Ceilings
38	Interior Damages at Skylight Leaks	Multiple Rooms
39	Poor Workmanship at Cabinetry in Dining Room	Dining Room
40	Improper Door Repairs - Dining Room & Kitchen	Dining Room & Kitchen
41	Roof Leak Resultant Damage - Kitchen Hall	Kitchen Hall
42	Patio Leak Resultant Damage - BR #2	Downstairs Bedroom #2
43	Patio Leak Resultant Damage - BR #4	Downstairs Bedroom #4
44	Broken Shower Neck Pipe	Bath #2
45	Cracked Floor Tiles	Laundry
46	Landscaping & Irrigation	Landscaping
47	Erosion at Culvert	Landscaping
48	Misc. Finish Carpentry	Multiple Rooms
49	Excessive Heat Build-up at Recessed Light Fixtures	Multiple Rooms
50	House Does Not Heat Adequately	Multiple Rooms
51	Window Trim Damaged	Study
52	Inadequate Clearance between Large Skylight Fascia and Roof	Roof

MFC# 19 Issue: **Inadequate Waterproofing/Flashings/Weepscreed Clearance at Patio Walls**

MFC# 19

Room/Area: **Patio Walls**

Claim:

Inadequate waterproofing and substandard weepscreed clearance has resulted in significant rot, fungus and water damage to all framed areas of the patio walls and the dog kennel area. Additionally, the sole plate of the west patio wall was of douglas fir and placed below grade - a code violation.

This type of assembly was found at MFC plan notes 20, 21, 22, 23, 38, the walls of 44, & 48.

MFC Repair:

Rebuild walls with adequate waterproofing membrane beneath stucco, no penetrations of the membrane at horizontal areas, weep screed clearance per UBC and drip cuts at soffits. Reinstall electrical where applicable.

See MFC Detail #1, 14 & others.

Section IV Reference: Site - Stucco Walls @ Decks. Plus \$6,150.00
Work Completed costs applied.

Apportionment to Repair: **\$40,563.12**

Comments on ABC Responsibility:

The contractor had a responsibility to construct these walls in such a way that they would be serviceable for, more or less, the life of the house, in our opinion - these are not "fences" which get replaced every 20+ years. In some instances these walls are a part of the house and in others adjacent or ancillary.

The additional cost to have built them so that they held water away from the wood frame would have been insignificant.

% to ABC: 90.0 % Allow to ABC: **\$36,506.81**

Comments on AIA Responsibility:

The exterior stucco covered wall details are, in our opinion, inadequate. See GFA 7C, 7D, 8C, 10B & 11-2.

% to AIA: 10.0 % Allow to AIA: **\$4,056.31**

MFC# 22 Issue: **Inadequate Waterproofing/Flashings at Central
Patio**

MFC# 22

Room/Area: **Central Patio**

Claim:

This area had the most extensive damage. The wooden post, joist and stair systems were severely deteriorated due to fungus and rot. The plywood substrate was completely rotten, falling off the bottom of the concrete as demolition took place. The joist system was 80% rotted through. The stair frame was mostly rotten and buried in the concrete lower stairs. The surrounding elevations' weep screeds were buried in the deck slab. At all three of the doorways leading from the deck into the house the threshold flashings leaked. Also, the planters were problematic- see issue following.

The waterproofing of the deck had failed, as at other patios, at all complex interfaces. As the concrete was demolished the patio framing collapsed. It had mostly deteriorated into crumbling black rot. This was exacerbated by the fact that there was, essentially, no venting of this area.

This was, in our opinion, a dangerous situation.

It should also be noted that the wire reinforcement of the concrete deck had little to no embedment - hanging down, in places, as the concrete deck was demolished.

This is MFC plan note 32.

MFC Repair:

Remove & reset doors to repair wood rot at edges and to properly flash. Replace rotten frame (including planter walls & both stairs) with concrete & masonry over compacted soils. Flash and waterproof deck to walls and stairs as necessary. Planters to be full height masonry with simple drains and irrigation per originals. Plantings per original (see Section IV for details on Landscaping).

See MFC Detail #'s 6, 7, 7.5 & 9.

Section IV Reference: Site - Patios and Stairs - Central Patio/Stairs. Apportionment to Repair: **\$26,232.38**
Plus \$4,920.00 Work Completed costs applied.

Comments on ABC Responsibility:

In our opinion, these damages have resulted from inadequate waterproofing/flushing of the patio-to-house interfaces, various deck penetrations, poor waterproofing at the planters, a lack of venting, and excessive water flooding the crawl from loose drain pipes.

These things were in the control of the contractor.

% to ABC: 95.0 % Allow to ABC: **\$24,920.76**

Comments on AIA Responsibility:

See Claim #21. Same comments.

% to AIA: 5.0 % Allow to AIA: **\$1,311.62**

MFC# 28 Issue: Planters Contacting Wood Frame

MFC# 28

Room/Area: Planters

Claim:

Planters were constructed against wood framed house walls and at wood framed elevated patios. Code requirement for 2" air gap with flashing or 6" w/o flashing was not observed.

Sheet 2 of the project plans specified pressure treated douglas fir or foundation grade redwood for the planters. We observed plain douglas fir planter framing throughout.

Waterproofing provisions have failed, leading to damaged framing and unanticipated drainage into crawl space. For example, running a hose in the upper planter outside BR #2 resulted in water moving through the frame and "daylighting" in the crawl space below, wetting the douglas fir frame.

What existed was a combination of loosely installed "Brai" type material, sans any upper lap, "leaning" against the inside walls. Dirt & water fell between the Brai & the frame. The house frame had plywood over it. The plywood was "waterproofed" with a thin coating of some kind of unreinforced asphaltic paint-on material.

The drains that were built into the planters leaked where they entered the framed assemblies and at various connections under the house.

Stucco was installed ending beneath grade without code required weep screed clearance (this per GFA Detail 7C) and without adequate waterproofing membrane to protect the wood frame of the planters.

Significant water damage has occurred. Refer back to the handwritten map and description of damages inserted at Claim #7.

Also, see Claim #46 below (Landscaping).

Planters were located against wood framed building walls and/or elevated patios at MFC plan notes 28, 30, 31, 33, 34, 36, 40 (@ stairs to lower patio), & 44. Also, plan note 62 refers generally to landscaping and may be used in reference to planter contents.

MFC Repair:

Remove stucco. Remove damaged frame and replace with masonry & concrete details to get wood grade above. Build to Bryce's (our consulting structural engineer) details. Run masonry from grade to top of planters. Install waterproofing, install drain & irrigation lead through masonry wall, connect drain to sub drain system, locate drain pipe in 12" of drain rock, cover drain rock with mirafi. Flash as necessary to prevent water from getting to frame or under house. Remove and reset soils and plantings. Stucco and paint.

See MFC Detail #7.5 & others.

Apportionment to Repair: **\$29,290.11**

Section IV Reference: "Planter..." subsections at Elevations: MBR, Entry Rear, LV Rm and BR#2, 4 & 3. Bracing line item at Interior - Lower Level - BR #2. Plus \$3,997.50 Work Completed costs applied.

Comments on ABC Responsibility:

We understand that ABC or forces under his supervision installed the waterproofing material in the planters, which failed. In our opinion, ABC should have been familiar with the minimum building standards requiring an air gap and flashing between planter boxes and wood framed walls as well as the 4" clearance from stucco weepscreed to grade.

In any case, the planters all leaked.

% to ABC: 90.0 % Allow to ABC: \$26,361.10

Comments on AIA Responsibility:

Some of the planters are drawn against wood framed walls, which violates the UBC (see attached code). Also, GFA's stucco detail shows stucco ending below grade (4" clearance required by 1985 UBC) and incomplete waterproofing membrane.

% to AIA: 10.0 % Allow to AIA: \$2,929.01