

# RAMTECH LABORATORIES



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## TEST REPORT

**LABORATORY NUMBER:**  
2299-08-05

**EVALUATION OF:**  
Foam Parapet System

**PREPARED FOR:**  
Foam Concepts, Inc.  
4729 Wesley Drive  
Anahiem, CA 92807

**TEST CONDUCTED AT:**  
Ramtech Laboratories  
14104 Orange Avenue  
Paramount, CA 90723

APPROVED BY:

**Steven  
Berggren**

Digitally signed by Steven  
Berggren  
DN: CN = Steven Berggren, C =  
US, O = Ramtech Laboratories  
Date: 2008.09.23 08:39:56 -07'00'

REVIEWED BY:

*[Handwritten Signature]*  
  
REGISTERED PROFESSIONAL ENGINEER  
RONALD I. OGAWA  
No. 16286  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA  
9/23/08

STEVEN BERGGREN

LABORATORY ADMINISTRATOR

DATE ISSUED: September 23, 2008

RONALD OGAWA P.E.

LABORATORY CONSULTANT

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The name of the client	1
The name of the person authorizing the test report	1
The signature of the person authorizing the test report	1
A statement to the effect that the results relate only to the items tested	1

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**BODY OF REPORT**

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**INTRODUCTION:**

In accordance with the client's request, Ramtech Laboratories conducted a "Fire Performance Test" on the sampled "Foam Parapet System"

The following Summary of Results and test data is presented in general accordance with the reporting requirements of ISO 17025.

**Summary of Results:**

Required Test	Reference Standard	Test Method	Condition of Acceptance	Test Results
Fire Performance	AC-161 (Section 4.7)	ASTM E-108	1. Temp < 750°F 2. No Ignition of Foam	<b>1. Pass</b> <b>2. Pass</b>

**1 The identification of the test method used:**

1.1 Testing was conducted in general accordance with AC-161 and ASTM E-108 (Modified Spread-of-Flame)

**2 A description of the items tested:**

2.1 The samples are described as a "Foam Plastic Shape" for parapet wall applications. For a complete description of this item, see Appendix 2 for a sketch

**3 Unambiguous identification of the items tested:**

3.1 The tested samples were identified by the client as "Test Specimen No. 1".

**4 The date of sampling:**

4.1 The material and fabrication of the test assembly was witnessed by Mr. Ronald Ogawa P.E. of R.I. Ogawa & Associates (AA-705) on August 7, 2008

**5 Unambiguous identification of the product sampled:**

5.1 Ramtech Laboratories identified the product as "Test Specimen No. 1" (see section 3.1)

**6 The location of sampling:**

6.1 The tested material was sampled at:  
6.1.1 Manufacturer Name: Foam Concepts  
6.1.2 Manufacturer Address: 4729 Wesley Drive, Anaheim CA

**7 A reference to the sampling plan and procedure:**

7.1 Mr. Ron Ogawa witnessed the fabrication of the product tested and documented the components of the Foam Parapet System".

**8 Details of the environmental conditions during sampling:**

8.1 Ramtech Laboratories provides the following details:  
Temperature: 75 F  
Humidity: 55% RH

**9 The date of receipt of the test items:**

9.1 Ramtech Laboratories received the test specimens on September 4, 2008

**10 The date of performance of the test:**

10.1 The test was conducted in September 2008

**11 Clarification of any deviations, additions and exclusions from the test method:**

11.1 Ramtech Laboratories tested the submitted samples in general accordance with the prescribed test methods.

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## TEST RESULTS

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### A Fire Performance Test:

#### A1 General:

A1.1 The purpose of this test was to provide "Objective Evidence" the client's fabricated "Foam Parapet System" complies with the conditions of acceptance as described in the ICC-ES Acceptance Criteria for Foam Plastic (Section 4.7) and as outlined below:

A1.1.1 There shall be no sustained flaming over the exterior face of the test specimen

A1.1.2 There shall be no lateral spread of flame from the path directly exposed to the flame

A1.1.3 The Fire-related damage to the core insulation shall not extend to either end of the test specimen

A1.1.4 The temperature of the core insulation shall not exceed 750 F

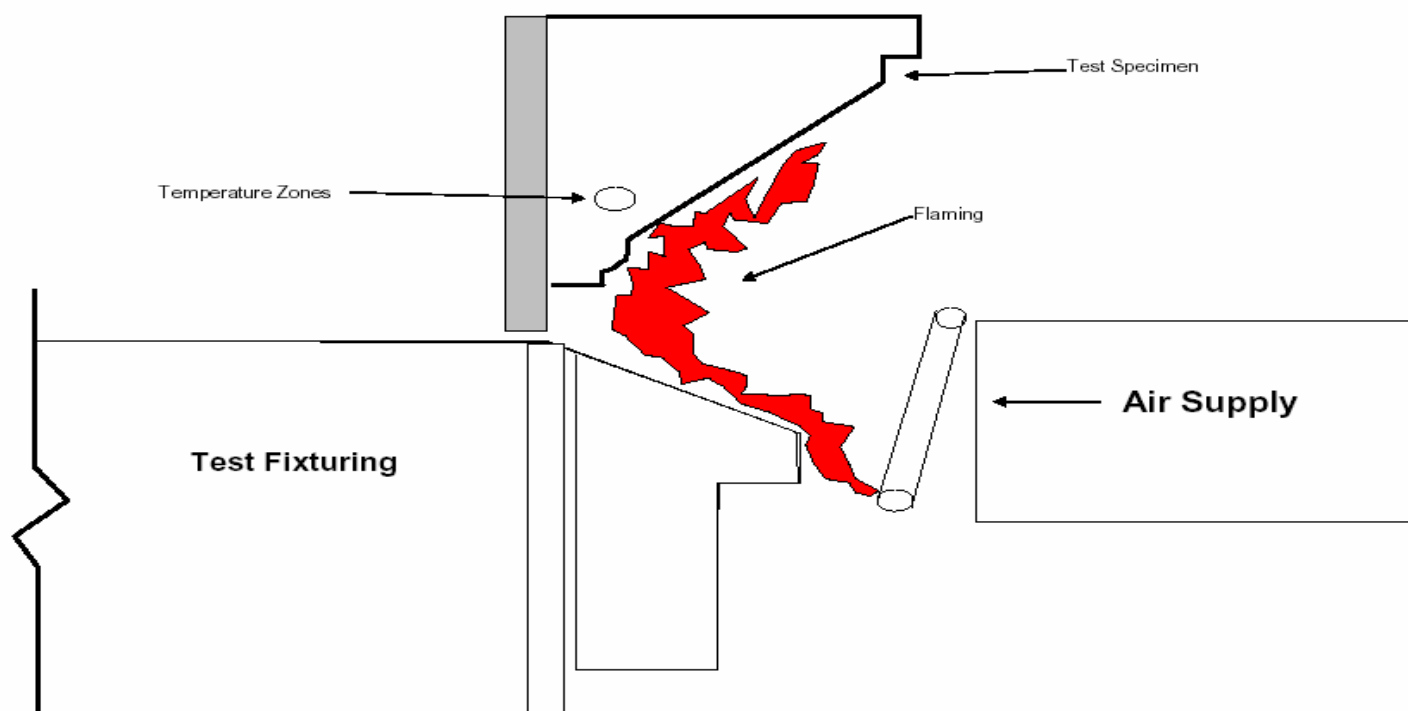
A1.1.5 There shall be no ignition of the foam plastic shape during the 15-minute test period

#### A2 Fabrication:

A2.1 One test specimen was prepared in accordance with the manufacturer's recommendation (See Appendix 2) and witnessed by Mr. Ogawa (See Appendix 3)

#### A3 Procedure:

A3.1 Testing was conducted in general accordance with ASTM E-108 (Section 9) for the Spread-of Flame except as modified in AC-161 (Section 4.7.2) and sketched below:



#### A4 Results:

A4.1 To the extent tested, the results of this test indicate the "Foam Parapet System" meets the conditions of acceptance as outlines in Section A1 of this test report.

A4.2 For detailed results of the time temperature cure at the four (4) measured locations, see Appendix 4 of this report

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**APPENDIX 1**

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Photo No. 1  
Front View of  
Parapet Wall  
After Testing



See Photo No.3

Photo No. 2  
Side View of  
Parapet Wall  
After Testing



Photo No. 3  
Sectional View  
of Parapet Wall  
After Test  
  
Note:  
Foam Plastic has receded  
from most heat affected  
area--- approximately 8  
inches from plaster shell

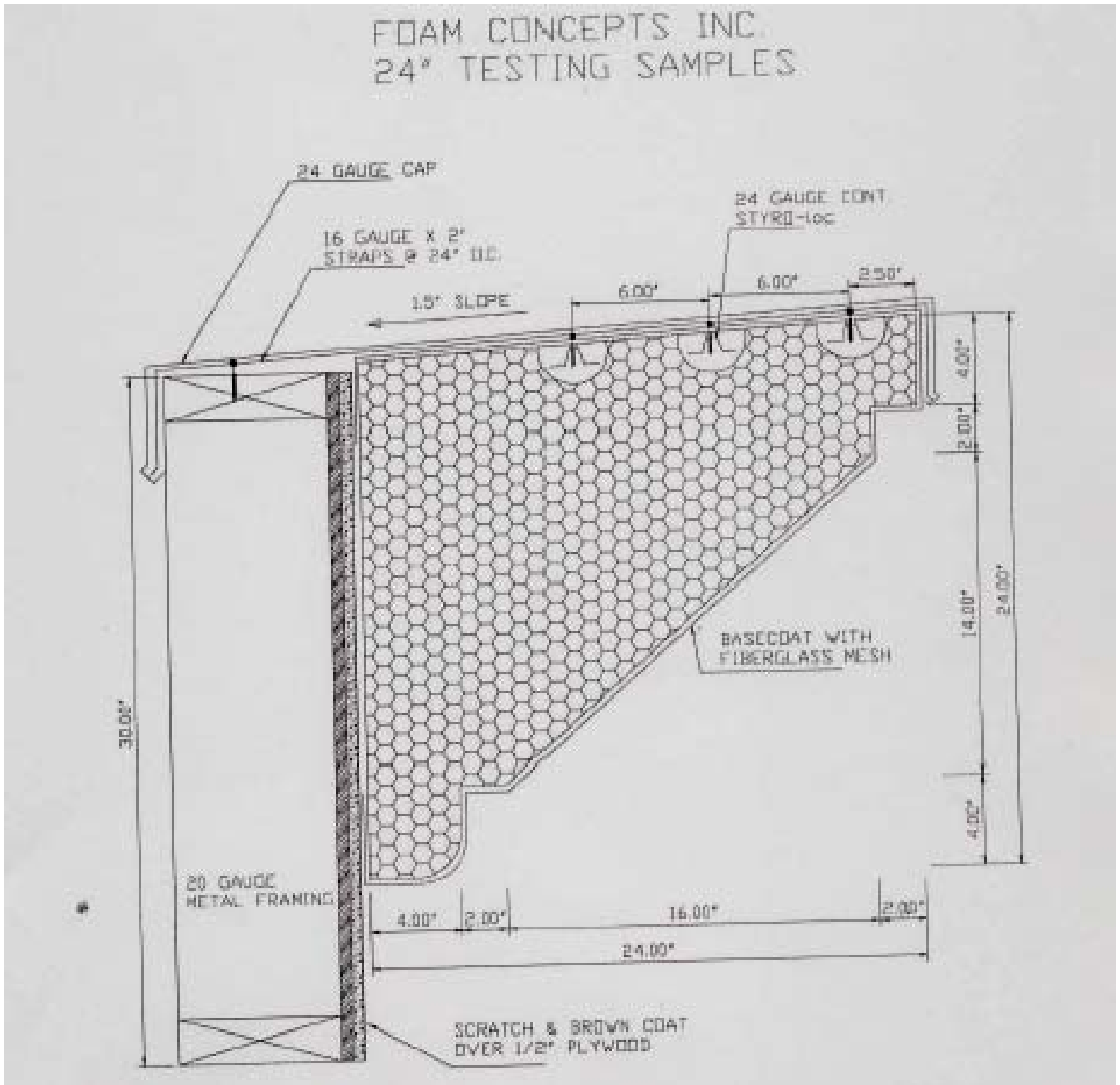
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## SKETCH



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# APPENDIX 3

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Ronald Ogawa Associates, Inc.  
5901 Warner Avenue, #376  
Huntington Beach, CA 92649

TRAVELER NUMBER: \_\_\_\_\_ DATE: 8/7/08  
 CUSTOMER: FOAM CONCEPTS P.O. NUMBER: \_\_\_\_\_  
 LAB NUMBER: \_\_\_\_\_ ORDER DATE: 8/1/08  
 MANUFACTURER: SAME  
 SPECIFICATION(S): FABRICATE CIRCLE ONE OR MORE:  
TEST ASSEMBLY INSPECTION   WITNESSING  SAMPLING

---

TIME IN: 10AM DATE OF INSPECTION: 8/7/08  
 TIME OUT: \_\_\_\_\_ 8/18/08, 8/20/08  
8/28/08  
 PERSON CONTACTED: Steve Ross  
 INSPECTOR: R. OGAWA  
 TYPE OF INSPECTION: WITNESS TEST ASSEMBLY FABRICATION

SAMPLES SELECTED: DWG OF TEST ASSEMBLY ATTACHED - REV.

MFG. LINE ( ) \_\_\_\_\_  
 YARD ( ) \_\_\_\_\_  
 JOB ( ) \_\_\_\_\_  
 OTHER  FOAM CONCEPTS FACILITY  
4729 E. WESLEY DR.  
ANAHEIM, CA

Note: 10 x 3/4" w/for head self drill screws, LATH TO PLASTER  
E.G.P.C. ON  
STUD.

SPECIAL INSTRUCTIONS: 1. FABRICATE 2 ASSEMBLIES - 1 FOR BACKUP.  
PER ATTACHED DWG. 2. 2x4 Nominal LOGA STEEL STUDS @ 24" o.c.  
1 1/2" Round, 60' Weather Resistant Barrier,  
expanded metal self furring metal lath.  
Started on 8/6/08  
3. Scratch plaster - 3 SAND, 1 cement w/ slight lime  
Applied on 8/18/08.  
4. Brown coat, 4 SAND, 1 cement w/ little lime Applied  
8/20/08  
5. Color coat Applied 8/28/08  
6. Foam Parapet cut from Type 1 EPS block supply  
by ACH - ICC-CS LISTED.  
7. PARAPET ADHERED TO STUCCO w/ OMEGA Dimple  
8. PARAPET SURFACE COATED WITH OMEGA  
ADKROPLEX EPS SYSTEM (OR4898)  
12 Two Assemblies  
Delivered to Ramtech 9/04/08 R. Ogawa

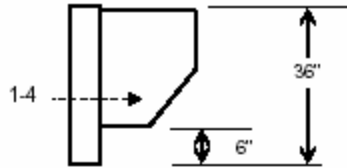
# APPENDIX 4

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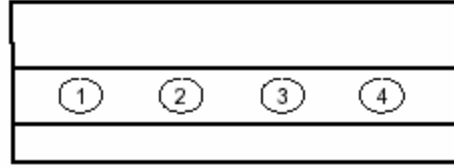
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## Time / Temperature Curve



Test Wall Side View



Test Wall Front View

Temperature Zone				
Time	1	2	3	4
0	77	77	77	77
1	78	78	78	78
2	78	78	78	78
3	79	79	79	79
4	79	79	79	79
5	79	79	79	79
6	79	83	79	79
7	79	86	81	79
8	80	100	86	80
9	80	107	105	80
10	83	116	126	87
11	90	119	141	95
12	96	121	151	115
13	105	123	164	126
14	113	127	172	136
15	118	131	177	150
16	126	133	186	164
17	134	136	194	177
18	141	139	203	190
19	148	142	211	203
20	156	145	220	216
21	163	148	228	229
22	170	151	237	242
23	177	154	245	255
24	185	157	254	269
25	192	160	262	282
26	192	160	262	282
27	192	160	262	282
28	191	159	261	281
29	190	158	260	280
30	189	157	259	279
31	188	156	258	278
32	184	150	248	265
33	180	145	240	260
34	176	139	231	250
35	172	134	222	241
36	168	128	213	232
37	164	123	204	223
38	160	117	195	214
39	156	112	186	205
40	152	106	177	196
41	148	101	168	187
42	144	95.3	159	178
43	140	89.8	150	169
44	136	84.3	141	160
45	132	78.8	132	151

