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201 NORTH FIGUEROA STREET  
LOS ANGELES, CA 90012

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OSAMA YOUNAN, P.E.  
EXECUTIVE OFFICER

Hammerhead International  
2925 North Lamb Boulevard  
Las Vegas, NV 89115

Attn: Tracy Lingo  
(702) 646-4275

RESEARCH REPORT: RR 26020  
(CSI # 13120)

REEVALUATION DUE  
DATE: January 1, 2019  
Issued Date: December 1, 2016  
Code: 2014 LABC

**GENERAL APPROVAL** – Renewal – Reynolds Polymer Technology, R-Cast Acrylic.

**DETAILS**

Hammerhead International installations accompanied by Reynolds Polymer Technology R-Cast Acrylic Panels are manufactured of polymethyl methacrylate resin. The panels are manufactured in thicknesses ranging from ½” to 8”.

Table 1: R-Cast Acrylic Panel, Material Properties

Description	Value (PSI)	ASTM Standard Criteria
Tensile Strength, $\sigma_t$	10,800	ASTM D638-10
Tensile Modulus, E	446,000	ASTM D638-10
Compressive Strength, $\sigma_c$	17,500	ASTM D695-10
Flexural Strength, $\sigma_f$	16,000	ASTM D790-10, Procedure A
Flexural Modulus, E	478,000	ASTM D790-10, Procedure A
Shear Strength, $\sigma_v$	10,000	ASTM D732-10

**The approval is subject to the following conditions:**

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Hammerhead International

RE: Reynolds Polymer Technology, R-Cast Acrylic Panels

1. End use of acrylic panels is outside the scope of this approval letter, thereby requiring compliance with the requirements of the 2014 Los Angeles Building Code applicable to end use.
2. R-Cast acrylic panel properties not expressly referenced herein are beyond the scope of this approval letter.
3. Panels must be installed by Hammerhead International in accordance with this report and the manufacturer's published installation instructions, a copy of which must be available at the jobsite.
4. Construction details and structural calculations for project specific conditions must be submitted to the Structural Plan Check Division for approval. The calculations and plans shall be signed and sealed by an engineer or architect licensed in the state of California.
5. R-Cast Acrylic panels are to be fabricated in the shop of a licensed fabricator approved by the Los Angeles City Department of Building and Safety and the R-Cast manufacturer.
6. R-Cast Acrylic panels shall be identified by a label noting the type of plastic, product thickness, manufacturer name and address and Los Angeles Research Report Number.
7. Impact resistance of acrylic panels has not been evaluated.

## **DISCUSSION**

The report is in compliance with 2014 Los Angeles Building Code.

The approval is based on following Test Standards:

- ASTM D638 – Standard Test Method for Tensile Properties of Plastics
- ASTM D695 – Standard Test Method for Compressive Properties of Rigid Plastics
- ASTM D732 – Standard Test Method for Shear Strength of Plastics by Punch Tool
- ASTM D790 – Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials

Addressee to whom this Research Report is issued is responsible for providing copies of it, complete with any attachments indicated, to architects, engineers and builders using items approved herein in design or construction which must be approved by the Department of Building and Safety Engineers and Inspectors.

This general approval of an equivalent alternate of the Code is only valid where an engineer and/or inspector of this Department has determined that all conditions of this Approval have been met in the project in which it is to be used.

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QUAN NGHIEM, Chief  
Engineering Research Section  
201 N. Figueroa Street, Room 880  
Los Angeles, CA 90012  
Phone – 213-202-9812  
Fax – 213-202-9943

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RR26020  
TLB1600376  
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