



LISTING INFORMATION OF  
**Pacific Bedrock Industrial Co. - ALLCOMB Panels**

SPEC ID: 45326

Pacific Bedrock Industrial Co., Ltd.  
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Hong Kong,  
Hong Kong

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ALLCOMB Panels are exterior wall cladding panels consisting of stone and porcelain panels adhered to an aluminum honeycomb core, which is adhered to a 1 mm aluminum facer on the interior face. The panels have a 1-inch nominal thickness and are supplied in widths and lengths as specified for the building design.

**FIRE RATINGS**

<b>Test Standard</b>	<b>Description</b>	<b>Results</b>
NFPA 285 (2012)	Standard Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components	Complies - See Design No. PCI-CWP 30-01
ASTM E84 (2016)	<b>Standard Test Method for Surface Burning Characteristics of Building Materials</b>	FS = 0 SDI - 5

**CODE COMPLIANCE RESEARCH REPORT**

<b>Evaluation Method</b>	<b>Building Code</b>	<b>CCRR Number</b>
ICC-ES AC04	2018 and 2015 IBC	CCRR-0286

<b>Attribute</b>	<b>Value</b>
Code Reports	Yes
Criteria	NFPA 285 (2012)
Criteria	ICC-ES AC04 (2012)
Criteria	ASTM E84 (2016)
CSI Code	07 42 43 Composite Wall Panels
Intertek Services	Certification
Listed or Inspected	LISTED
Listing Section	BUILDING PANELS
Listing Section	BUILDING MATERIALS WITH SURFACE BURNING CHARACTERISTICS
Report Number	G103618431/Oasis i7435.01
Spec ID	45326

# DRAWING INDEX

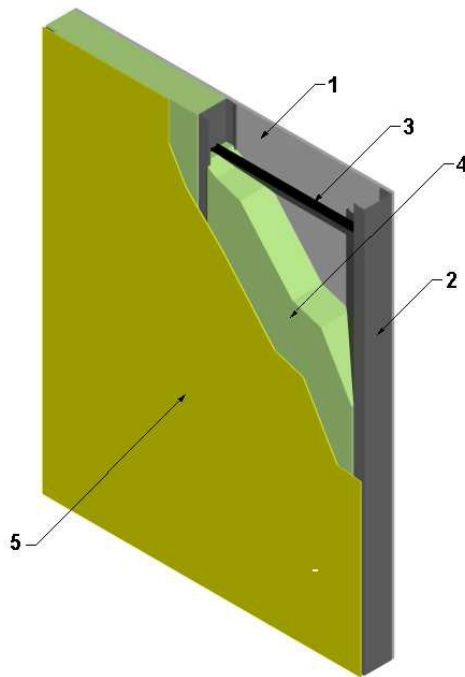
PBI-CWP 30-01

# PBI-CWP 30-01



Division 07 – Thermal and Moisture Protection  
 07 42 00 Wall Panels  
 07 42 43 Composite Wall Panels

Pacific Bedrock Industrial Co., Ltd.  
 Design No. PBI/CWP 30-01  
 Non-Load Bearing Wall System  
 ALLCOMB Panels  
 NFPA 285  
 Rating: Meets Conditions of Acceptance



**1. INTERIOR CLADDING:** Install nominal 5/8 in. Type X gypsum board with long dimension perpendicular to steel studs (Item 2). Attach to steel studs (Item 2) using min. #6 Type S, 1-1/4 in. long bugle-head screws spaced 8 in. on center (oc) around perimeter and 12 in. oc in the field.

A. JOINT TAPE AND COMPOUND – (Not Shown) Joints and fasteners in the gypsum board (Item 1) have a Level 2 finish complying with GA-216 or ASTM C840.

**2. STEEL STUDS:** Use min. 3-5/8 in. deep, 16 GA, galvanized steel studs spaced a max. of 24 in. oc. Secure steel studs to 20 GA top and bottom tracks using min. 1/2 in. long self-drilling pan-head framing screws.

Steel studs must be laterally braced with 16 GA steel spaced max. 48 in. oc vertically.

**3. EXTERIOR SHEATHING:** Min. 5/8 in. thick DensGlass Gold Exterior Sheathing (Georgia Pacific) installed with the long edge

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perpendicular to the studs; secured with #6 × 1-1/4 in. self-drilling screws spaced max. 8 in. oc around the perimeter and 12 in. oc in the field.

4. **WATER-RESISTIVE BARRIER:** Tyvek Commercial Wrap applied horizontally over the exterior sheathing with 4 in. overlap at horizontal joints.
5. **EXTERIOR INSULATION:** 3 in. thick 4 pcf Roxul Cavity Rock mineral wool insulation installed with long dimension parallel to the studs and secured in place with 20 GA galvanized steel 1-1/2 in. × 3 in. Z-profile subgirts.
6. **PANEL SUPPORT SYSTEM:** (Not Shown) 20 GA, 1-1/2 in. × 3 in. galvanized steel Z-profile subgirts are attached vertically to the studs using Buildex Tex #12 × 1-1/2 in. hex-head self-drilling screws spaced per design but no greater than 16 in. oc vertically.

The 3-1/2 in. wide TC-1A Rails are installed perpendicular to studs and z-girts, and are attached to the z-girts using Buildex Teks #14 × 2-1/2 in. hex-head self-drilling screws spaced per design but no greater than 16 in. oc.

7. **CERTIFIED MANUFACTURER:** Pacific Bedrock Industrial Co., Ltd.

**CERTIFIED PRODUCT:** ALLCOMB Panels

Division 07 – Thermal and Moisture Protection  
07 42 00 Wall Panels  
07 42 43 Composite Wall Panels

The panels are non-load bearing exterior wall cladding panels consisting of an aluminum honeycomb core with an interior facing of 1mm aluminum and an exterior facing of stone or porcelain. The panels are nominally 1 in. thick.

The panels have factory-attached clips on the interior face. The spacing of the clips will vary depending on the panel size but shall be no greater than 30 in. horizontally and vertically. Each panel shall have a min. of four clips.

A min. 1 in. air gap is required between exterior insulation and interior face of the panels.

**JOINTS** – Vertical joints between panels must be a min. of 36 in. above any opening. Panel joints must be filled with H.B. Fuller Firesound sealant or Dow Corning 795 Silicone Building Sealant.

8. **OPENINGS:** (Not Shown) Openings must be covered with 12-1/4 in. × 3 in., 20 GA galvanized steel flashing, secured to the wall framing using #6 × 1-1/4 in. self-drilling, zinc-plated, bugle-head screws spaced a max. of 12 in. oc.
9. **FLOOR LINES:** (Not Shown) Min. 4 in., 4 pcf Thermafiber mineral wool is compression fit in each stud cavity at the floor lines.

**DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION**

**Section: 07 42 43 – Composite Wall Panels**

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**ADDITIONAL LISTEE:**  
FOSHAN ALLCOMB CURTAIN WALL CO., LTD  
No. 56 A-2 one A-1 of D District  
Sanshui Industrial Park  
Foshan (residence declaration)  
Guangdong province,  
China

**REPORT SUBJECT:**  
ALLCOMB Panels

### 1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2018 and 2015 *International Building Code*® (IBC)

NOTE: This report references 2018 Code sections with [2015] Code sections shown in brackets where they differ.

1.2 The ALLCOMB Panels have been evaluated for the following properties (see Table 1):

- Structural – wind resistance
- Weather resistance
- Durability
- Surface-burning Characteristics

1.3 The ALLCOMB Panels have been evaluated for the following uses (see Table 1):

- Exterior wall cladding on Types I through V construction
- Interior Finish

### 2.0 STATEMENT OF COMPLIANCE

ALLCOMB Panels comply with the Codes listed in Section 1.1, for the properties stated in Section 1.2 and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.

### 3.0 DESCRIPTION

#### 3.1 ALLCOMB Panels:

ALLCOMB Panels are nonload-bearing exterior wall cladding panels consisting of an aluminum honeycomb core with an interior facing of 1mm aluminum and an exterior facing of stone, porcelain or aluminum. The panels are nominally 1-in. thick.

The panels have factory-attached clips on the interior face. The spacing of the clips will vary depending on the panel size but shall be no greater than 30 in. horizontally and vertically. Each panel shall have a minimum of four clips.

See Figures 1 through 4 for illustrations of the panel and attachment clips.

#### 3.2 Extrusion Rails:

Extrusion rails are provided for attaching the panels to the structure. The extrusion rails must be 6063-T5 or -T6 aluminum alloy complying with ASTM B221. The rails are 4mm thick and 23.3mm deep. See Figure 2 for an illustration of the rails.



## 4.0 PERFORMANCE CHARACTERISTICS

### 4.1 Wind Resistance:

The panels, when installed in accordance with this report have an allowable transverse load resistance of 49 psf, positive and 29 psf negative.

Allowable negative wind load (29 psf) is governed by anchor clip capacity. Greater allowable negative wind pressure up to 49 psf maximum can be achieved with anchor spacing less than the maximum allowed spacing of 30 in. vertical and 30 in. horizontal. The maximum negative wind load per anchor clip shall not exceed 180 lbf.

### 4.2 Surface-burning Characteristics:

The panels have a flame-spread index of 25 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E84 and comply as a Class A interior finish in accordance with IBC Section 803.

## 5.0 INSTALLATION

### 5.1 General:

The panels must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation.

The panels are supplied to the jobsite with clips attached at the spacing determined by the designer but with spacing no greater than 30 in. horizontally or vertically. Attachment of the extrusion rails to the structure is determined by the designer for the applicable loads. Maximum deflection limit of the supporting wall construction is  $L/240$ .

Allowable wind loads apply to design loads derived from nominal wind speeds ( $V_{asd}$ ).

A water-resistive barrier and flashing shall be installed in such a manner as to prevent the accumulation of water within the wall assembly, as required by IBC Section

1403.2. Joints between the panels must be sealed in accordance with the manufacturer's instructions.

For seismic design, attachment of the panels to the structure must be designed in accordance with Section 13.5.3 of ASCE 7.

### 5.2 Use on Exterior Walls of Types I, II, III or IV Construction:

When used on exterior walls of Types I, II, III or IV construction, walls must be as described in Intertek Design Listing PBIC/CWP 30-01. Joints between panels must be sealed with H.B. Fuller Firesound sealant or Dow Corning 795 Silicone Building Sealant.

## 6.0 CONDITIONS OF USE

**6.1** Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

**6.2** The design and attachment of the panels and extrusion rails are outside the scope of this report and must be justified to the satisfaction of the building official.

**6.3** Use of the panels in fire-resistance-rated construction is outside the scope of this report and must be justified to the satisfaction of the building official.

**6.4** The panels are manufactured in Guangdong, China, under a quality control program with inspections by Intertek Testing Services NA, Inc.

## 7.0 SUPPORTING EVIDENCE

**7.1** Data in accordance with applicable sections of the ICC-ES Acceptance Criteria for Sandwich Panels (AC04), dated February 2012, editorially revised July 2015.

**7.2** Data in accordance with the ICC-ES Acceptance Criteria for Sandwich Panel Adhesives (AC05), dated June 2009, editorially revised July 2015.





7.3 Intertek Test Report 102738533SAT-003, dated December 12, 2016, on testing in accordance with NFPA 285.

7.4 Intertek Product Evaluation 103363463SAT-001, dated January 30, 2018, on use of Dow Corning 795 sealant.

7.5 Quality control documentation.

7.6 Intertek Listing Report "ALLCOMB Panels", on the [Intertek Directory of Building Products](#).

### 8.0 IDENTIFICATION

The ALLCOMB Panels are identified with the Pacific Bedrock Industrial Co., Ltd., name, address and phone number; the product name; the project name; the panel code; the Intertek Mark; and the Code Compliance Research Report number (CCRR-0286).

### 9.0 OTHER CODES

This section is not applicable.

### 10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

10.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

10.3 Reference to the <https://bpdirectory.intertek.com> is recommended to ascertain the current version and status of this report.

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TABLE 1 – PROPERTIES EVALUATED

PROPERTY	2015 IBC SECTION	2012 IBC Section
Structural - wind resistance	1609	1609
Weather resistance	1403.2	1403.2
Durability	104.11	104.11
Surface-burning characteristics	803	803
Use on exterior walls of Types I, II, III or IV construction	1403.5	1403.5



Figure 1 – Panel Clips



Figure 2 - Rails





Figure 3 – Panel Clips Engaging Rails





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Figure 4 – Typical ALLCOMB Panel Assembly

