



Building Permit Application
City of Portland, Oregon - Bureau of Development Services

1900 SW 4th Avenue, Portland, Oregon 97201 • 503-823-7310 • TTY 503-823-6868 • www.portlandoregon.gov/bds

12-131137 RS

Type of work

- New construction Addition/alteration/replacement
 Demolition Other:

Category of construction

- 1 & 2 family dwelling Commercial/industrial Accessory building
 Multifamily Master builder Other:

Job site information and location

Job no.: Job address: 2922 NE 32nd Ave

City/State/ZIP: Portland

Suite/bldg./apt. no.: Project name:

Cross street/directions to job site:

Subdivision: Lot no. Tax map/parcel no.

Description of work

Voluntary Seismic Retrofit

Reference RS / Combination Permit no.

Property owner **Tenant**

Name: Andy + Coey Wells

Address: Same

City/State/ZIP:

Phone: FAX:

Owner installation: This installation is being made on property that I own, which is not intended for sale, lease, rent, or exchange.

Owner signature: Date:

Contractor

Business name: MW Seismic

Address: 2649 SE Stephens St.

City/State/ZIP: PD

Phone: FAX:

CCB lic. no. 186559

Authorized signature: MW

Print name: Michael Weber Date: 9/18/12

Applicant **Contact Person**

Business name: MW Seismic

Contact name:

Address:

City/State/ZIP:

Phone: FAX:

E-mail:

Authorized signature:

Print name: Date:

This permit application expires if a permit is not obtained within 180 days after it has been accepted as complete.

Office Use Only

Permit no:

Date received:

By:

Required Data: One and Two Family Dwelling

Permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.

Valuation:	<u>2000.00</u>
Number of bedrooms:	
Number of bathrooms:	
Total number of floors:	
New dwelling area:	square feet
Garage/carport area:	square feet
Covered porch area:	square feet
Deck area:	square feet
Other structure area:	square feet

Required Data: Commercial Use

Permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.

Valuation:	
Existing building area:	square feet
New building area:	square feet
Number of stories:	
Type of construction:	
Occupancy groups	
Existing:	
New:	

Notice

All contractors and subcontractors are required to be licensed with the Oregon Construction Contractors Board under ORS 701 and may be required to be licensed in the jurisdiction in which work is being performed. If the applicant is exempt from licensing, the following reasons apply.

Statement of Fact: I certify that the facts and information set forth in this application are true and complete to the best of my knowledge. I understand that any falsification, misrepresentation or omission of fact (whether intentional or not) in this application or any other required document, as well as any misleading statement or omission, may be cause for revocation of permit and/or certificate of occupancy, regardless of how or when discovered.

Building Permit Fees*

Please refer to fee schedule

Fees due upon application	
Amount received	
Date received	

Sub-contractor information can be faxed to 503-823-7693.

2922 NE 32nd Ave.

30'

Floor Diaphragm

L90s
20 per wall
TYP.

UFPI0
8 per wall
TYP.

City of Portland
REVIEWED FOR CODE
COMPLIANCE
APR 17 2012
Permit Number

40'

12-131137RS

Explanation of drawings for 2922 NE 32nd Ave: Seismic Retrofit

The attached drawing specifies placement of hardware required for a seismic retrofit of the home located at the above address. The calculations below were used to determine the amount of hardware required. The attached drawing will be used as a reference for the installation of equipment to complete the retrofit.

Calculation for weight of house:

Main floor: 1194 sq ft x 50 lbs/sq ft = 59,700 lbs

Second floor: 624 sq ft x 30 lbs/sq ft = 18,720 lbs

Total weight of house: 78,420 lbs

Calculation of shear forces generated during an earthquake:

$V=R(W)$

V = shear force generated at foundation

R = ground force acceleration rate of 0.25

W = weight of house, or 78,420

$V = 0.25 \times 78,420 \text{ lbs} = 19,605 \text{ lbs shear}$

Calculation of equipment needed to withstand shear force during an earthquake:

Lateral load rating for Simpson UFP10 = 1340 lbs shear

Lateral load rating for Simpson L90/H10(R)/LTP4 = 500 lbs shear

Quantity needed per side of house = lbs shear from house/ lbs Lateral load resistance of equipment

UFP10's = $19,605 \text{ lbs}/1340 \text{ lbs} = 8 \text{ UFP10s per wall}$

L90/H10(R)/LTP4 = $19,605 \text{ lbs}/500 \text{ lbs} = 20 \text{ L90/H10(R)/LTP4s per wall}$

Fasteners:

L90/H10(R): 10d (0.148) x 1-1/2" nails

LTP4: 8d (0.131) x 1-1/2" nails

UPF10's: 2 options

1) Hilti KH-EZ 1/2"x4-1/2" screw anchor

2) 1/2" x 5-1/2" zinc plated all-thread rod and Hilti Max 150 SD adhesive

