

# ISO-PYRAMID

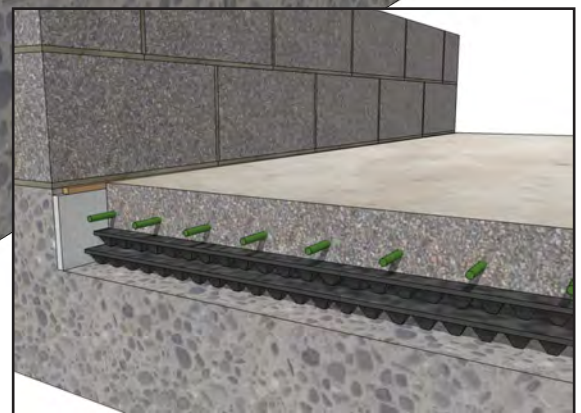
## IMPACT AND VIBRATION ISOLATION PAD



### 1 Layer ISO-PYRAMID

**ISO-PYRAMID** is a molded shock and vibration isolation pad currently available in 25 mm thick by 1 m x 1 m square sheets. Iso-Pyramid is an extremely versatile vibration isolator that can be used in single or double layers beneath poured concrete slabs to create an acoustically isolated floating floor or housekeeping pad for mechanical equipment. Alternatively, Iso-Pyramid can be supplied as discreet isolators for lighter load applications.

One side of the Iso-Pyramid pad has individually molded rubber pyramids with the exact angle controlled by the molding process. They are integrally molded with a 6 mm thick layer of the same material. There is no bridging between the pyramid isolators except for this integral layer. Loading is up to 2,160 lbs per sq. ft. or 10,500 Kg per sq. meter. While evenly supporting the slab,



Mechanical Room Floor

### 2 Layers ISO-PYRAMID

Iso-Pyramid reduces contact with the primary building structure by over 95%.

Iso-Pyramids are self-adjusting to load. Light loads only engage a very small tip of the pyramid while heavier loads or impacts deflect the pyramids to engage a wider cross section of the rubber isolators.

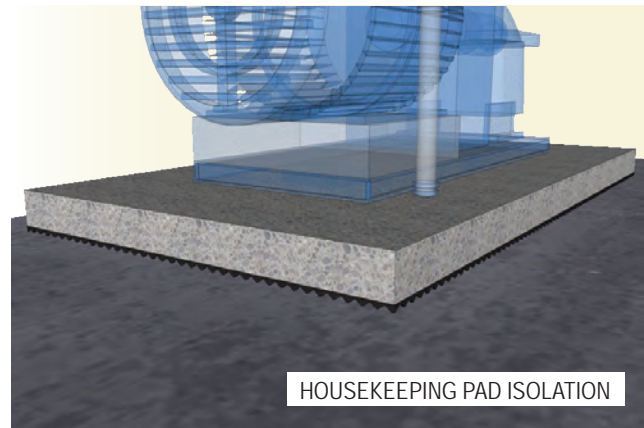
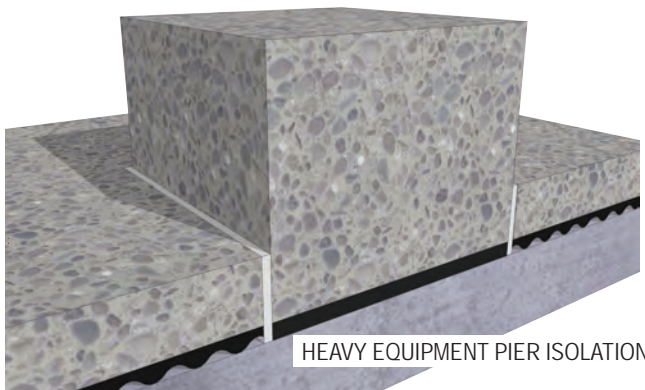
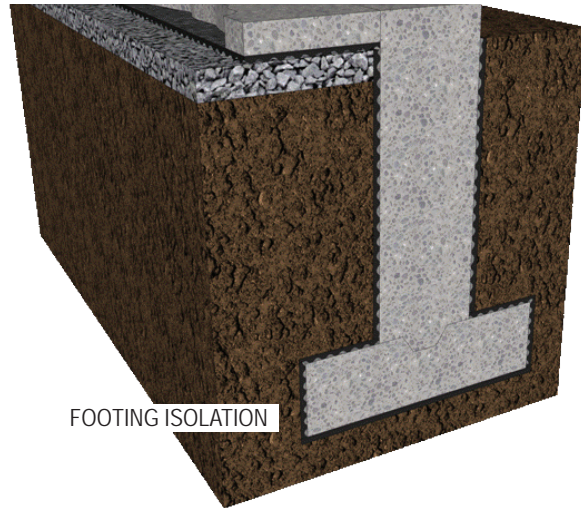
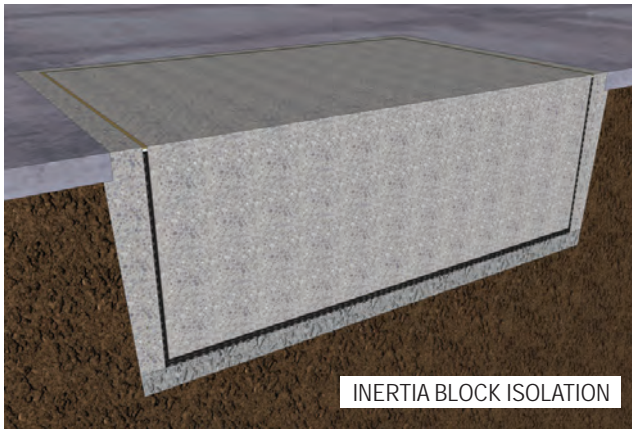
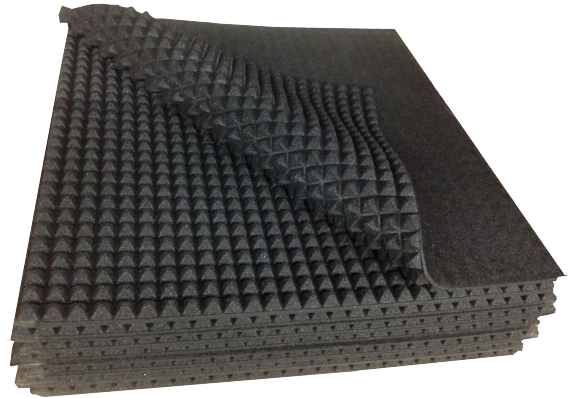
Iso-Pyramid sheets are made from 100% re-cycled rubber crumb. The rubber crumb sizes and shapes are carefully factory controlled and are bound together with permanently elastic proprietary polyurethane binders.

**ISO-PYRAMID** pads can be safely and quickly moved and installed by one person. No special installation trades are required. Just place the sheets, cut to fit, cover with poly sheeting (optional) and place the steel and concrete. Unlike heavy rolled rubber goods that require more than one person to move them, Iso-Pyramid sheets are much easier to install for a reduced in-place cost. Because it's available in 1 m x 1 m squares, cutting for penetrations is much easier and more accurate. Expansion joint filler is used against all based building interfaces and penetrations. Peel and stick tape is also used to seal seams between sheets and at expansion joint filler.

The pyramid isolators are perfectly aligned with clear spaces between the rows for ease of cutting. Alternate uses include isolation isolators directly under machine feet and HVAC equipment rails. A single row of Iso-Sep Pyramid pads fits perfectly on the width of standard 2 inch (nom.) stock to easily isolate floating wood or steel platforms.

Iso-Pyramid screen isolation sheets can aid specifiers by contributing towards earned LEED (NC-CI-EB) points.

Packaged in 1 m square pallets. Iso-Pyramid sheets 'nest' together getting as much as 2 times the amount of material on a smaller skid for transport efficiency and reduced shipping cost.

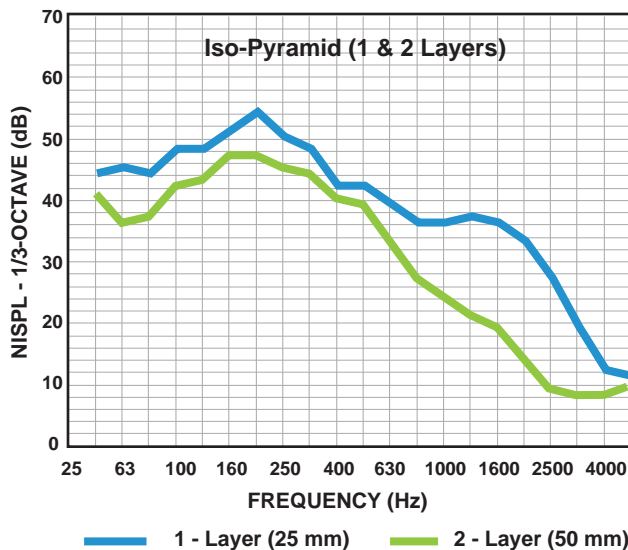


## Acoustic Performance

NRC Specimen Description		1 - Layer (25 mm)	2 - Layer (50 mm)
1. Structural Floor 150 mm concrete 2. Test Interlayer 25 mm or 50 mm 3. Topping Floor 100 mm concrete 4. Test Area 17.85 m <sup>2</sup>		Normal Impact Sound Pressure Level	
	FREQUENCY (Hz.)	NISPL 1/3 - Octave (dB)	NISPL 1/3 - Octave (dB)
See Note *	50	50	47
	63	51	42
	80	50	43
IIC freq's	100	54	48
	125	54	49
	160	57	53
	200	60	53
	250	56	51
	315	54	50
	400	48	46
	500	48	45
	630	45	39
	800	42	33
	1000	42	30
	1250	43	27
	1600	42	25
	2000	39	20
2500	33	15	
3150	25	14	
See Note *	4000	18	14
	5000	17	16
ASTM E492	IIC	60	66
ISO 717-2	Ln, w	50 dB	

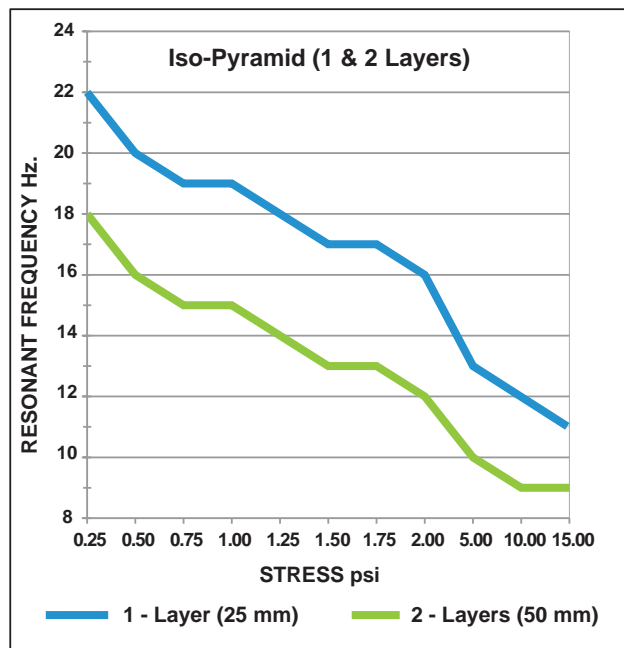
**Note:** Standard IIC and Ln,w tests include frequencies in the calculations between 100 Hz. and 3150 Hz only.

Due to the nature of noise through floor/ceiling assemblies, it is useful for test data below 100 Hz and above 3150 Hz to be indicated for all "interlay isolation" systems.



## Natural Frequency vs. Load

Stress psi	Resonant Frequency (Hz.)	
	1 - Layer	2 - Layers
0.25	22	18
0.50	20	16
0.75	19	15
1.00	19	15
1.25	18	14
1.50	17	13
1.75	17	13
2.00	16	12
5.00	13	10
10.00	12	9
15.00	11	9



Acoustic testing by:  
NRC – National Research Council Canada

## Features

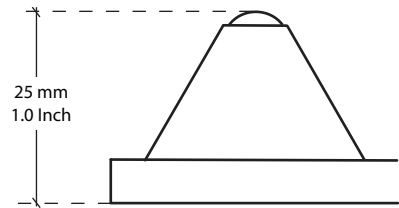
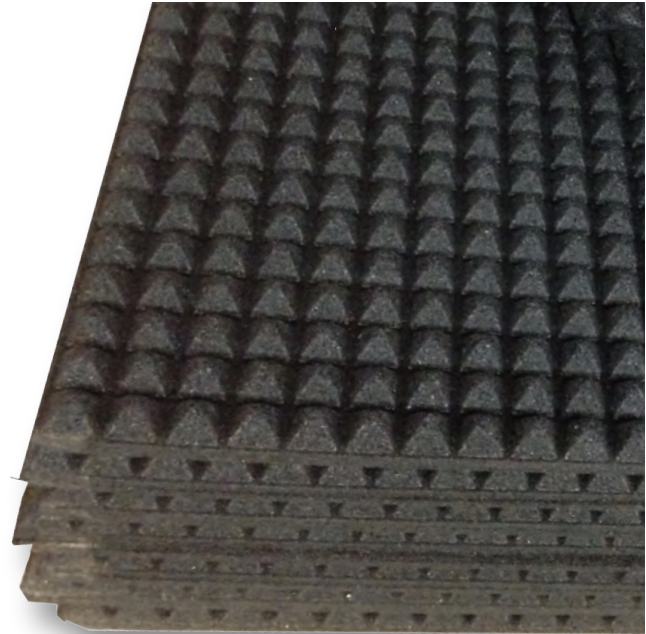
- 100% Recycled rubber crumb
- Qualifies for LEED points
- Bacteria and mold resistant
- Unaffected by water
- Can be safely loaded to 2,160 lbs. / sq. ft.
- Drop in-place = fast install
- As compared to roll goods – Iso-Pyramid sheets are easier to trim and fit around columns and services
- Requires no plywood for concrete pour over

## Maintenance

No maintenance required.

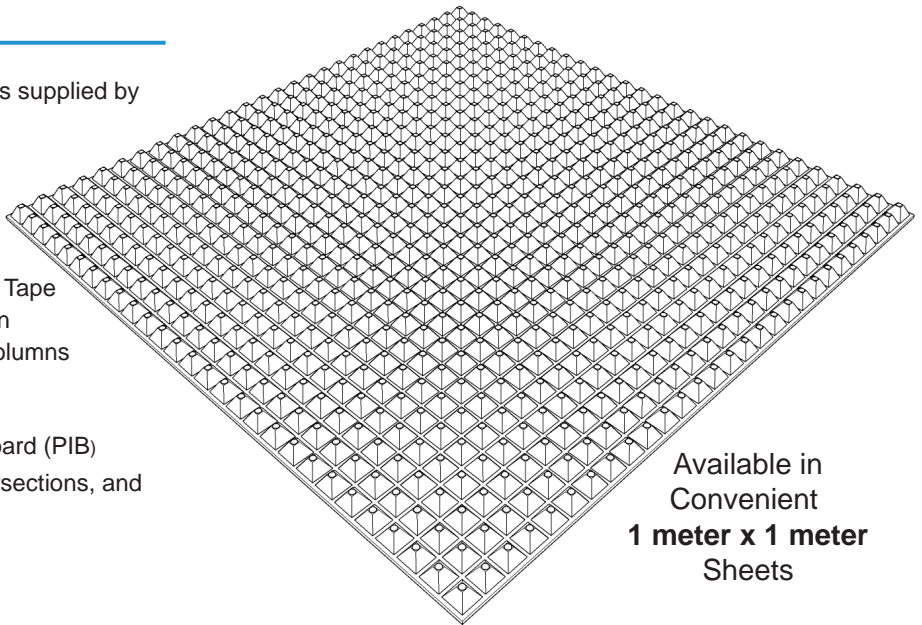
## Physical Properties

Sheet Dimensions	1.0 m x 1.0 m 3.28 ft. x 3.28 ft.
Sheet Weight	9.37 Kg 20.66 Lbs.
Thickness	25 mm 1.0 Inch
Type-A Hardness	30 Durometer (approx.)



## Specification Notes

1. Isolation pad Shall Be ISO-PYRAMID as supplied by AcoustiGuard® – WILREP LTD.
2. ISO-PYRAMID pad Shall Be installed pyramid profile side down.
3. AcoustiGuard® – All Weather Flashing Tape Shall Be used for taping seams between sheets, wall & slab intersections, and columns & services.
4. AcoustiGuard® – Perimeter Isolation Board (PIB) Shall Be used between wall & slab intersections, and columns & services.



Available in  
Convenient  
**1 meter x 1 meter**  
Sheets