



## VIBRATION ISOLATION MATERIALS

Wide range of uses:

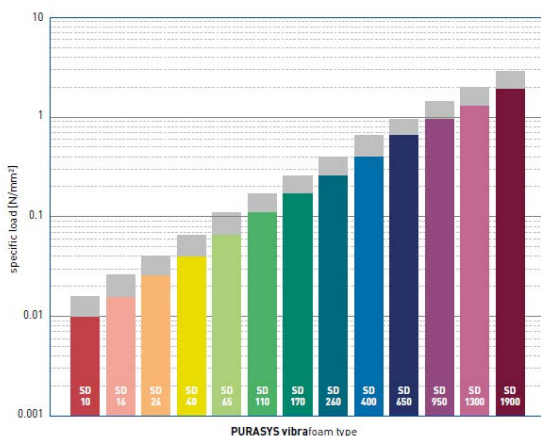
- ♦ Commercial Facilities
- ♦ Industrial Facilities
- ♦ Medical Facilities
- ♦ Machinery Foundations
- ♦ Medical Equipment
- ♦ Quality Rooms
- ♦ Building Sections
- ♦ Column Supports
- ♦ Sidewalls

# vibrafoam and vibradyn

High quality PUR elastomers designed for construction, industrial and commercial applications for maximum protection against disturbing vibrations.

PURASYS PUR-materials (vibrafoam and vibradyn) are polyurethane based cellular elastomers which have outstanding static and dynamics characteristics under compression oriented vertically or horizontally. These advanced PUR elastomers can be applied in full surface area, concentrated load area or strip load area configurations. They are widely recognized as the go-to solution for a wide range of applications within Civil, Commercial and Industrial sectors. The three product lines have a wide range of materials of different densities and load ranges, and three types of cellular structures for different external environments. They are supplied in a standard thickness sheet with distinctive colors for easy recognition. Customized sizes and thicknesses can also be provided tailored to unique application requirements.

## vibrafoam



PURASYS vibrafoam series working range

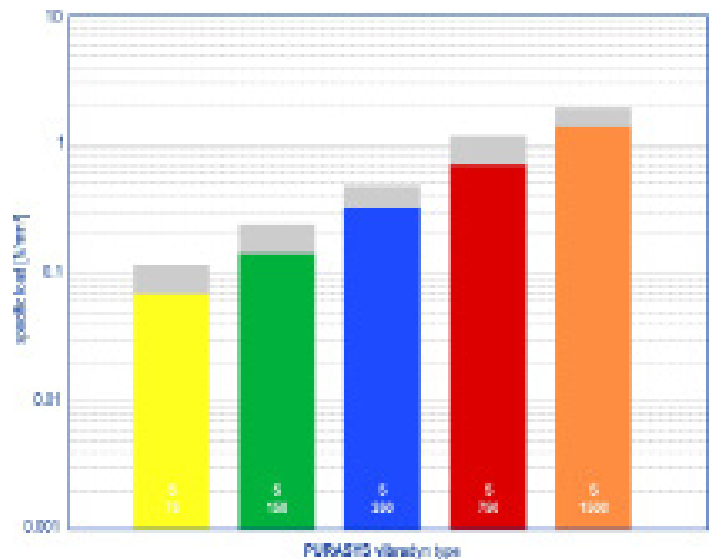
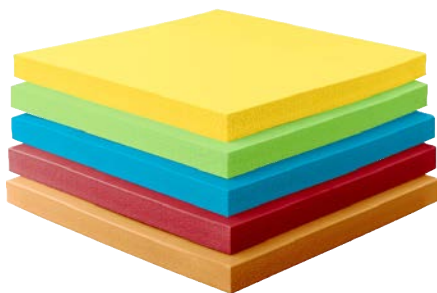


Color coded for easy identification and placement

- ◇ Reliable, predictable characteristics
- ◇ Highly resilient
- ◇ Dimensionally stable
- ◇ Moisture resistant
- ◇ Wide temperature range (-22° F to 158° F)
- ◇ Abrasion resistant
- ◇ Ozone resistant

## vibradyn (Closed Cell Foam)

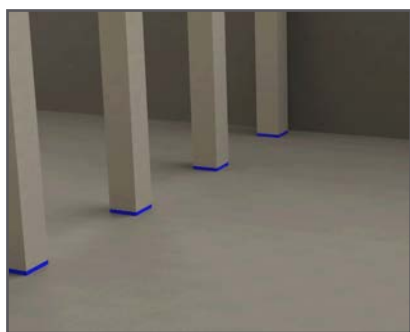
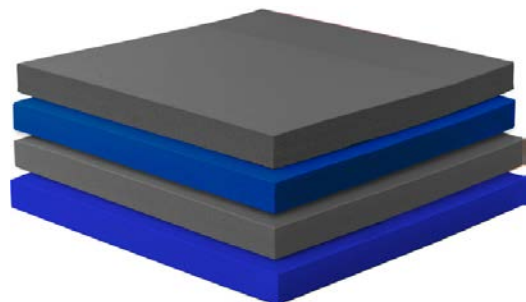
vibradyn has a closed cell structure suitable for applications where groundwater is present. Vibradyn comes in 5 different standard types to cover most application requirements.



*The wide range of standard materials allows our engineers to select the ideal material for practically any area, shape, load, or environment.*

# vibradyn HL

vibradyn HL offers a closed cell structure combined with high density foam ideal for extreme concentrated loads such as foundation column supports.



Recommendation for elastic bearing

Static load: up to  $\text{N/mm}^2$  [ $\text{lbf/in}^2$ ]

**3.00 [435.1]**

Dynamic load: up to  $\text{N/mm}^2$  [ $\text{lbf/in}^2$ ]

**4.50 [652.7]**

Load peaks:  $\text{N/mm}^2$  [ $\text{lbf/in}^2$ ]

**10.5 [1522.9]**

Values depending on form factor and apply to form factor  $q=3$

Recommendation for elastic bearing

Static load: up to  $\text{N/mm}^2$  [ $\text{lbf/in}^2$ ]

**6.00 [870.2]**

Dynamic load: up to  $\text{N/mm}^2$  [ $\text{lbf/in}^2$ ]

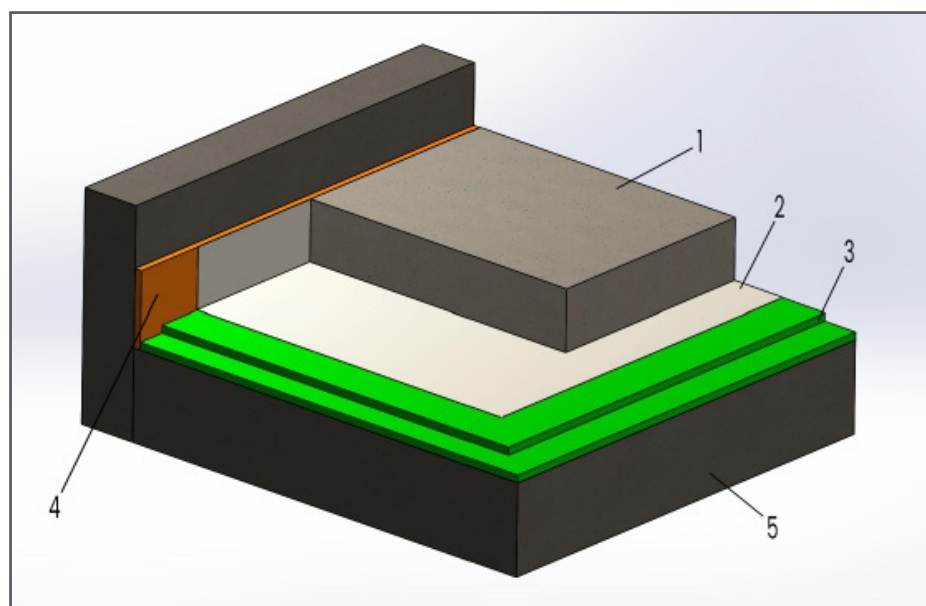
**9.00 [1305.3]**

Load peaks:  $\text{N/mm}^2$  [ $\text{lbf/in}^2$ ]

**18.0 [2610.7]**

Values depending on form factor and apply to form factor  $q=3$

## Vibration isolation material application examples



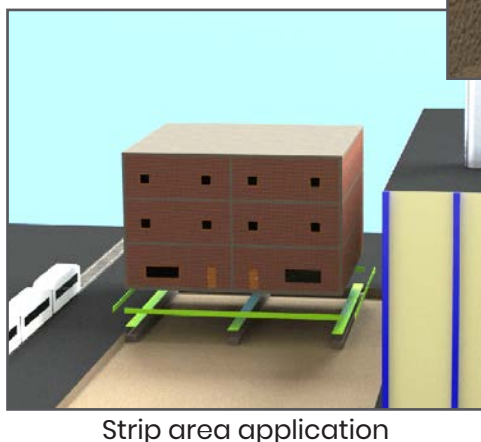
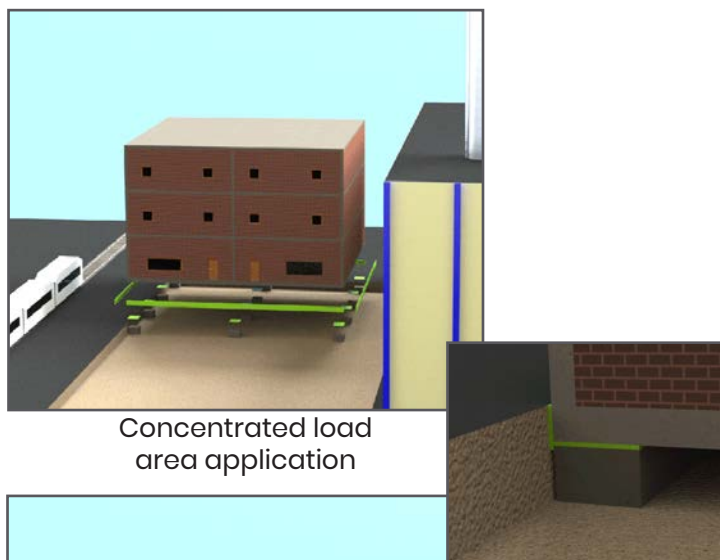
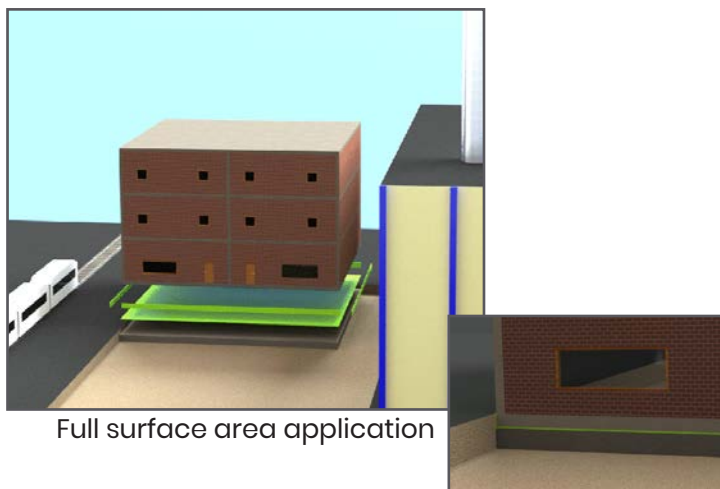
1. Top floor or inertia mass.  
(e.g., concrete)
2. Polyethelene or similar plastic sheeting.
3. Horizontal application of sheets or strips of vibrafoam or vibradyn.
4. Vertical application of vibrafoam or vibradyn between perimeter sidewalls.
5. Sub foundation.



# Types of Applications

The isolation of building structures prevents disturbing noise and vibration from negatively affecting equipment, machinery, personnel and increases property value.

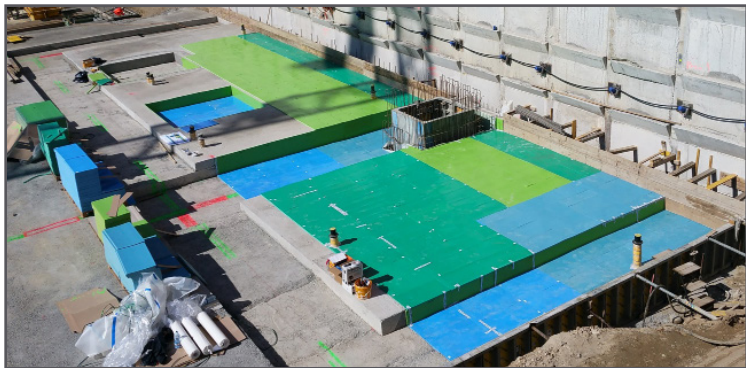
*High-performance isolation material provides effective protection against vibration when placed beneath, around and between structural components.*



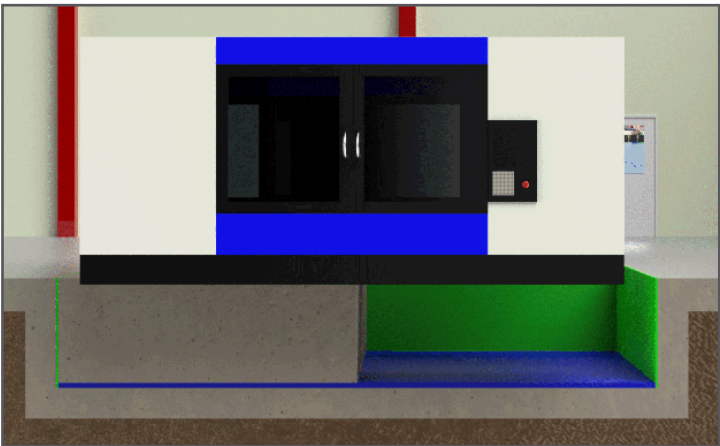
# Isolated Foundations

Prevent transmission of disturbing vibration and noise.

Using the right high-performance vibrafoam or vibradyn materials prevents transmission of disturbing vibration to precision machinery. Including engineered vibrafoam or vibradyn in foundation construction minimizes vibration transmitted to the surroundings from high-impact machinery. Including vibrafoam or vibradyn materials in facility design and construction provides the best environment for people, machinery, and sensitive equipment.



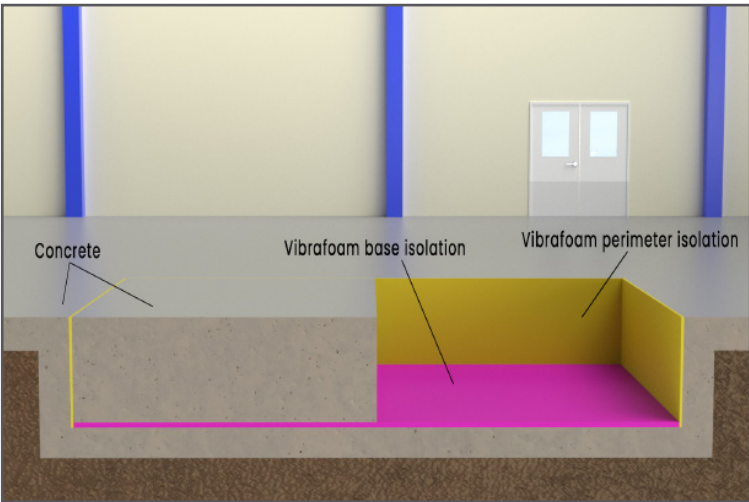
Full surface area installation



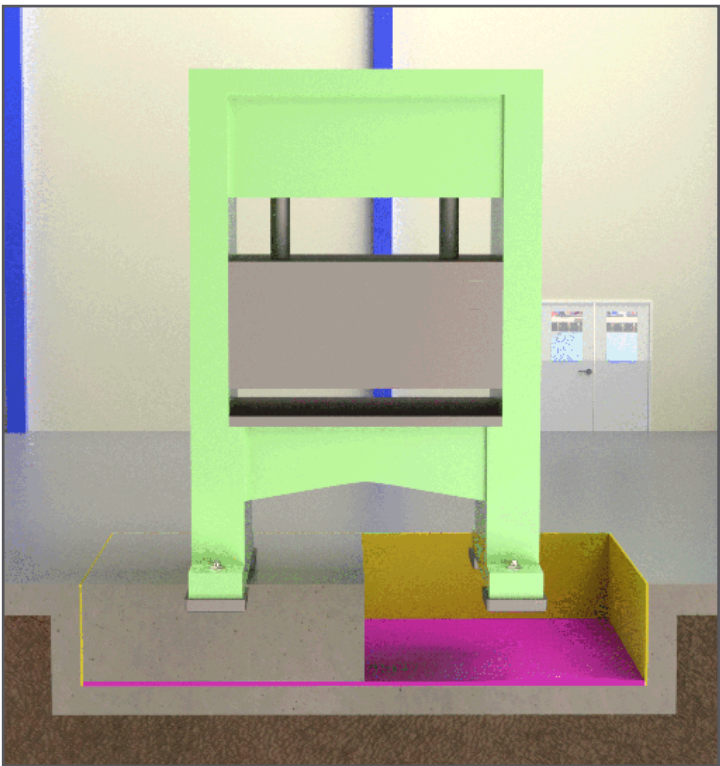
Machine tool foundation



Pit installation



Machine Foundation



Stamping press foundation



# Your Engineering Resource

## Expert Guidance

Our experienced engineering team will work with you directly to find the material that best meets the requirements of each installation area.

Our Engineering team's capability:

- ♦ Work closely with you to fully understand your application and its challenges.
- ♦ Review construction drawings and applicable standards.
- ♦ Recommend the type and application of vibrafoam or vibradyn material.
- ♦ Provide onsite supervision ensuring correct implementation of solution.
- ♦ Provide you with installation guidelines if onsite supervision is not desired.
- ♦ Provide supplementary materials for applications (membranes, installation tapes, etc.)

## A Wide Range of Uses

- ♦ 3D printers
- ♦ Fitness center flooring
- ♦ Blacksmith hammers
- ♦ Circuit printing rooms
- ♦ CMM machines
- ♦ CNC machine tools
- ♦ Libraries
- ♦ EDM machines
- ♦ Flying cutoff presses
- ♦ Laser cutting
- ♦ Metrology labs
- ♦ Microscopes
- ♦ MRI/Medical equipment
- ♦ Precision scales
- ♦ Quiet rooms
- ♦ Video quality inspection
- ♦ And many other applications

## Our other product lines



Spring Isolators



Wire Rope Isolators



Elastomer Isolators



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Broadview, IL 60155-3941  
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Toll Free: 1-800-842-7668  
Fax: 1-708-345-2225  
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