PILLAR SLIDING BEARING MATERIAL series

UNI-TON® Bearing

The vibration, displacement or deflection may occur at the expansion point such as corridor, roof, etc. of building structure due to earthquake, wind or temperature change.

The PILLAR UNI-TON Bearing is a bearing provided with "Roller function" and "Pin function" in combination, which works to absorb such displacement and deflection, to enhance the safety of structure.

It has been adopted a lot to diversified market including building or civil work.

Type-MM UNI-TON® Bearing

Type-RX UNI-TON® Bearing

Connecting corridor

Roof beam

Bridge

Feasibility

Since the PILLAR UNI-TON Bearing uses fluorene resin having high self-lubricity on its sliding surface, it assures the roller (siding) function at low friction.

The sealed elastomer (chloroprene rubber) assures the pin function (absorption of deflection and angle) freely in any direction.

It is possible to equip the safety stopper of each type (prevention of excessive movement, floating) within bearing.

Since the PILLAR UNI-TON Bearing is designed compactly, it can be installed easily.

The PILLAR UNI-TON Bearing is available in rich assortment, and is compatible even to special design requirements.

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Application example

Standard design criteria

Standard material

1. Metallic material – JIS G3101: Rolled steels for general structure (SS400)
2. Bearing material – FLUORORAD® & JIS G4305:Cold-rolled stainless steel plate (SUS304)
3. Rubber – JIS K6283 (Chloroprene rubber)
4. Painting – Primer coat after foundation is adjusted: Zinc-rich primer coating

Groundworks – Epoxy resin system paints

Standard design specification

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Groundworks – Epoxy resin system paints

Japanese

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Groundworks – Epoxy resin system paints

Japanese

Standard design criteria

Design of bearing

1. Short-term vertical load capacity is calculated in 1/10 times the long-term vertical load capacity.
2. Interferential load of modular bearing in vertical is the one that can be added by the sliding prevention stopper.
3. The standard design does not take into account simultaneous exposure to uplift load or short-term vertical load and horizontal load.
4. Application of full course of the standard design is applicable for all required special designs. Please contact PILLAR UNI-TON for more information.

Japanese

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