Data sheet for seismically isolated buildings

The committee on international affairs of Japan Society of Seismic Isolation (JSSI) is planning to make an international database of seismically isolated buildings in order to achieve the following objectives;

1) To share information on the design of seismically isolated buildings and seismic isolation devices such as isolator and dampers in the world.

2) To improve and promote seismically isolated buildings widely in the world by sharing the collected information.

The committee would be grateful if all related colleagues and countries would understand and cooperate with our request.

November 2017

Japan Society of Seismic Isolation (JSSI)

Chairman of Committee on International Affairs

Dr. Taiki Saito

DATA SHEET OF SEISMICALLY ISOLATED BUILDING

Japan Society of Seismic Isolation, November 2017

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Outline of Building** | | | | | | | | | | | |
| Name | | |  | | | | | | | | |
| Location | | |  | | | | | | Country： | | |
| Year of Completion | | | \_\_\_\_\_\_\_\_ | | | | | | | | |
| Use | | | □Residence　□School　□Hospital　□Office　□Shop　□Other（　 　　　） | | | | | | | | |
| Structure | | | □Reinforced Concrete(RC)　□Steel(S)　□Steel and Reinforced Concrete(SRC) 　□Steel Concrete Column+ Steel  □　Masonry □Other ( ) | | | | | | | | |
| Number of Story | | | ＿F　、B＿F、　PH＿F | | | | | | | | |
| Location of Isolator | | | □Base isolation　□Intermediate Story（＿F　□Top of Column/□Bottom of Column） | | | | | | | | |
| Max. Building Height | | | \_\_\_ 　m | | | Total Floor Area | | | | \_\_\_\_\_\_\_\_\_\_ m2 | |
| Type of Foundation | | | □Direct foundation　　□Pile □Other ( ) | | | | | | | | |
| Type of Soil | | | □Solid　□Medium　　□Soft | | | | | | | | |
| Monitoring System | | | * Instrumented (□Orbiter □Seismograph)　　□ Not instrumented | | | | | | | | |
| **Seismic Isolation Design 　（□X,　□Y　Direction）** | | | | | | | | | | | |
| Based Seismic Code | | | | Name＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿（Year＿＿\_\_） | | | | | | | |
| Calculation Method | | | | □Response Spectrum Method 　□Time History Response Analysis  □Other ( ) | | | | | | | |
| Input Ground Motion for Time History Analysis | Maximum | | | □[ ] gal (cm/sec2)、　□[ ] kine (cm/sec) | | | | | | | |
| Input Direction | | | * Uni-Directional Excitation □ Bi-Directional Excitation   □With /□Without Vertical Component | | | | | | | |
| Superstructure | Fixed Base Natural Period | | | | | | \_\_\_ sec | | | | |
| Base Shear Coefficient | | | | | |  | | | | |
| Maximum Story Drift (R) | | | | | | \_\_\_\_ m　　(Drift Angle R:\_\_\_) | | | | |
| Seismic Isolation Level | Clearance (Seismic Gap) between Building and Surrounding Ground | | | | | | \_\_\_\_ m | | | | |
| Target Design Displacement | | | | | | \_\_\_\_m | | | | |
| Natural Period at Target Design Displacement | | | | | | \_\_\_\_sec | | | | |
| Equivalent Damping Coefficient at Target Design Displacement. | | | | | | \_\_\_\_ | | | | |
| Shear Coefficient at Design Displacement | | | | | | \_\_\_\_ | | | | |
| Maximum Response Displacement | | | | | | \_\_\_　m | | | | |
| Number of Devices | | | | | | □Isolator(Rubber);\_\_\_□Isolator(Slider Bearing);\_\_\_\_\_ □Damper;\_\_\_\_\_\_\_ | | | | |
| **Seismic Isolation Devices** | | | | | | | | | | | |
| Type of Isolator | | □Rubber | | | | | □Natural Rubber Bearing (NRB)  □Lead Plug Bearing (LRB)  □High Damping Rubber Bearing (HDR) | | | | |
| □Slider Bearing | | | | | □Slider with Elastomer  □Rigid Slider  □Spherical Slider | | | | |
| □Roller Bearing　　　　　□Other ( ) | | | | | | | | | |
| Remarks on Isolator： | | | | | | | | | |
| Performance Characteristics of  A Typical Isolator | | Diameter | | | \_\_\_\_\_mm | | | Height | | | \_\_\_\_\_mm |
| Ultimate disp. | | | \_\_\_\_\_mm | | | Ultimate Shear Strain | | | \_\_\_\_\_% |
| Design vertical load | | | \_\_\_\_\_KN | | | Maximum Vertical Load | | | \_\_\_\_\_KN |
| Rubber Thickness and Number of Layer | | | | | | \_\_\_\_mm x \_\_\_\_layer | | | |
| Supplementary Damper | | □Use　 □Not use | | | | | | | | | |
| Type of Damper ： | | | | | | | | | |
|  | | Remarks on Damper: | | | | | | | | | |
| **Contact Person (Arbitrary)** | | | | | | | | | | | |
| (Name, Company, Institute, Contact Address, etc.) | | | | | | | | | | | |

|  |
| --- |
| **Outside Picture of Building, Plan, Elevation, Section, etc. (Free Format, Arbitrary)**  Japan Society of Seismic Isolation, November 2017 |
|  |
| (Continued if necessary)  Japan Society of Seismic Isolation, November 2017 |