OCP SUMMIT

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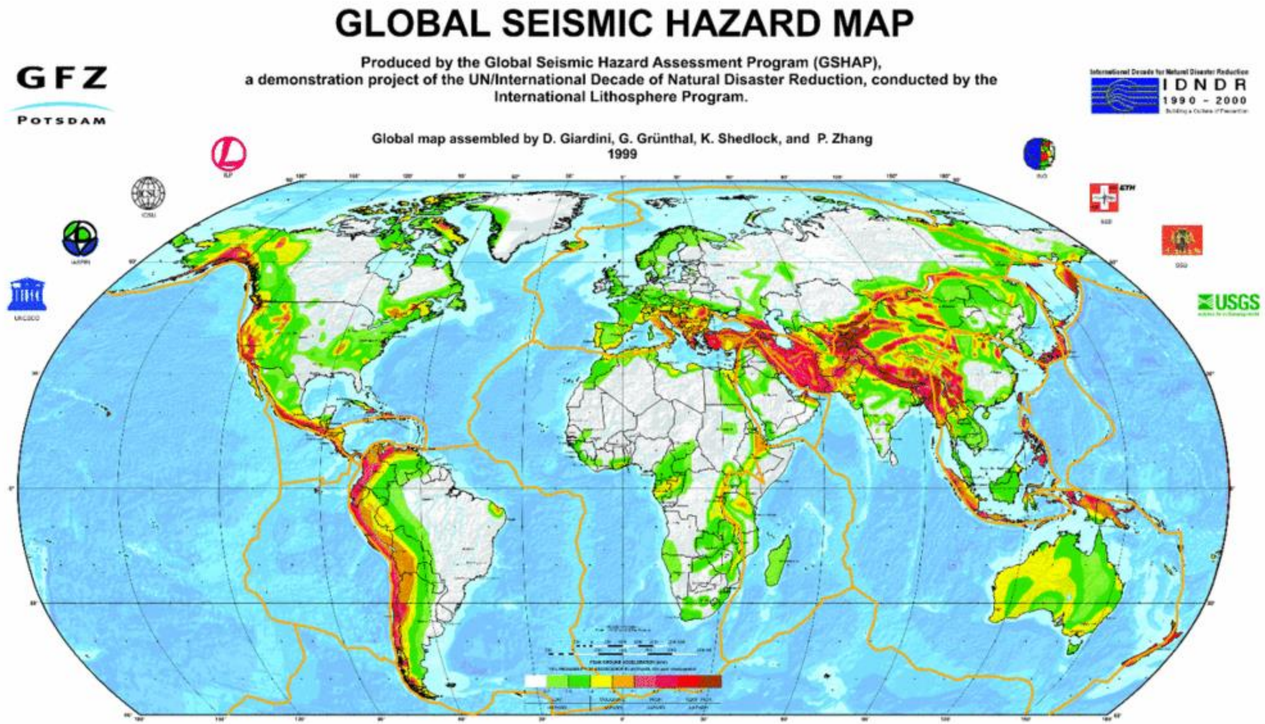
NEBS seismic Zone-4 kit for open rack v2; Specification Introduction and test results

Juha Klemola / HW Architect / Nokia

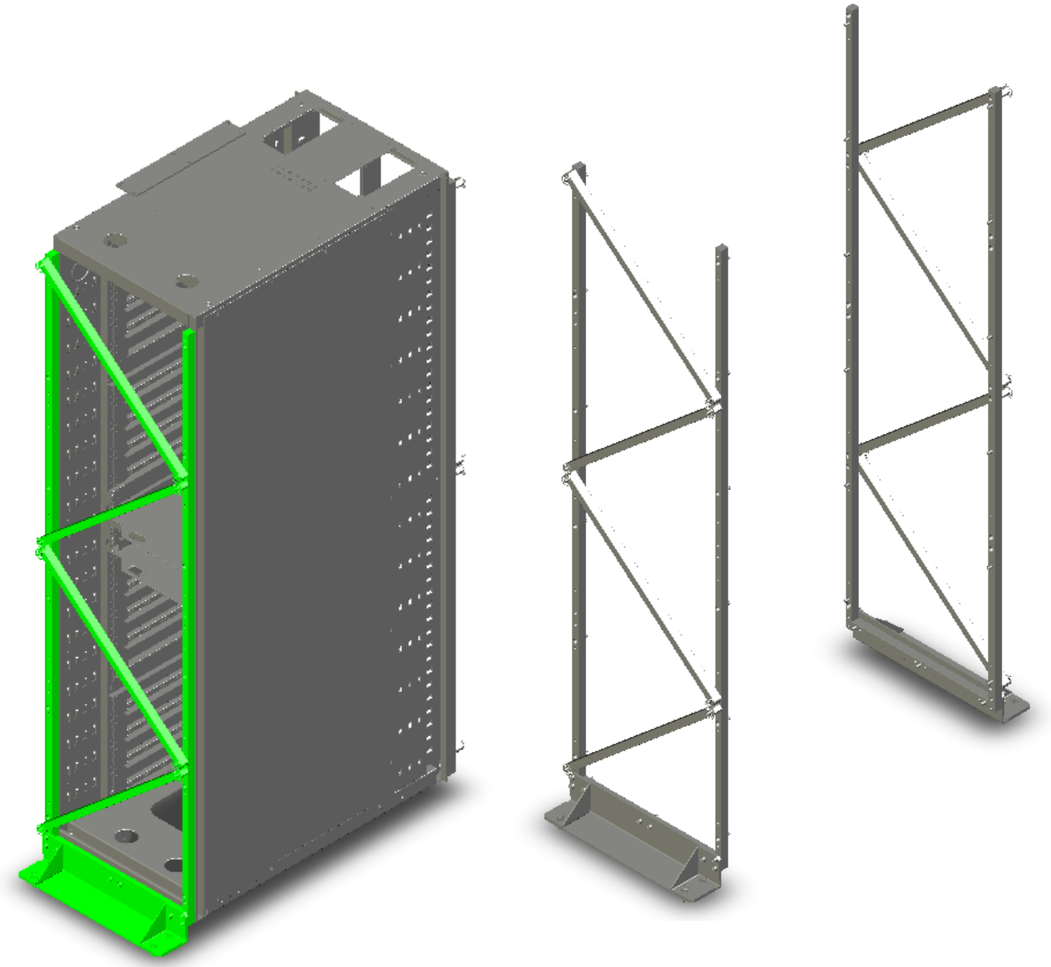
Overview
Seismic kit specification

Specification defines Optional Seismic kit for Open Rack V2 to fulfill the Zone 4 criteria defined by Telcordia GR-63-CORE



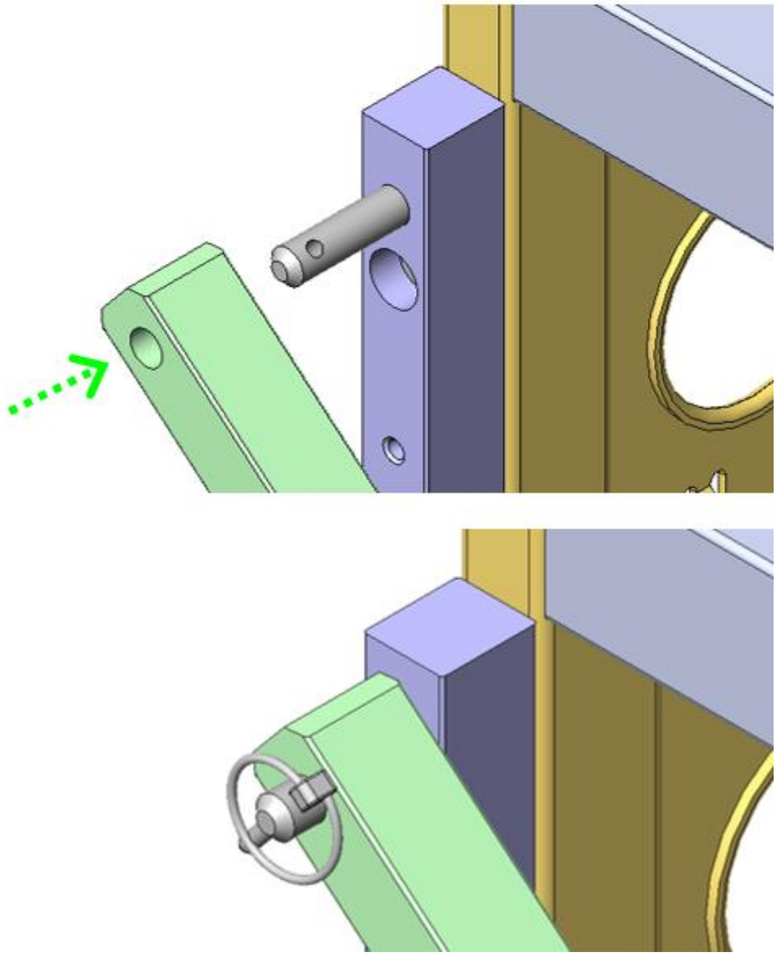
Seismic kit specification

- Seismic kit is designed as bolt-on option for Open rack V2. It consists set of steel beams to reinforce the Open Rack V2 frame and floor mounting brackets to secure the rack to datacenter floor structures.



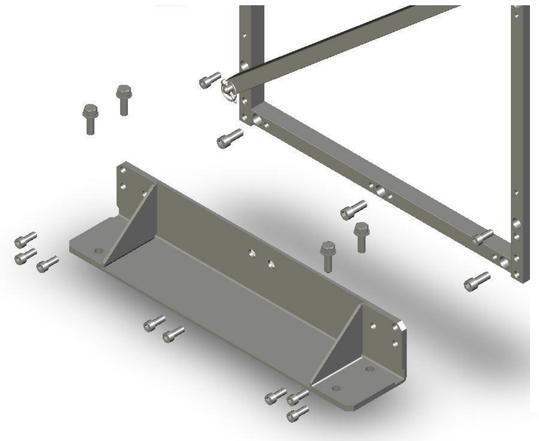
Tool-less serviceability

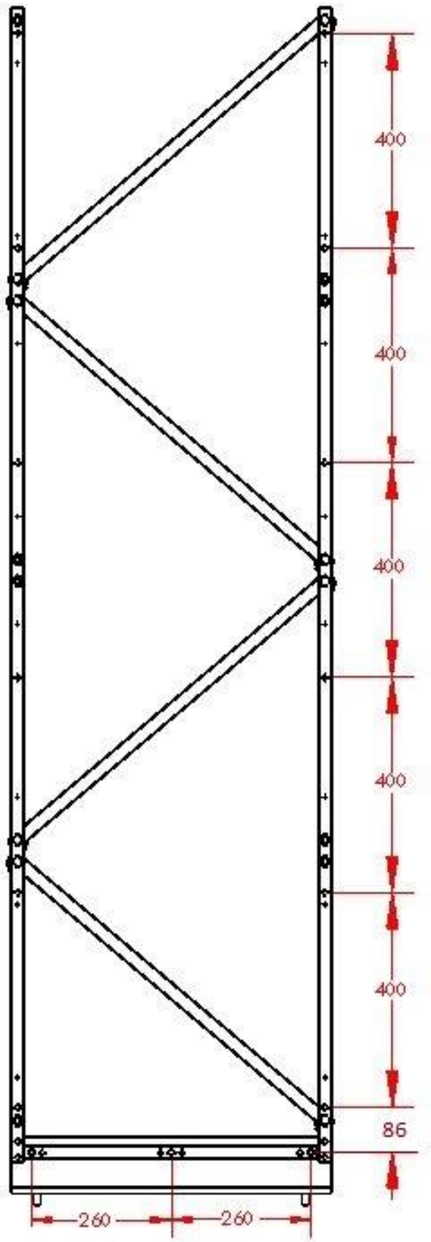
- Seismic kit provides full tool-less serviceability in front and rear of the OCP rack.
- Diagonal beams can be removed by opening quick release clevis pins for maintenance actions.



Kit Installation to Open Rack

- Strengthening vertical beams are mounted to rack frame using 6+6M10 bolts. The horizontal beam is mounted to the rack using 3xM12 bolt
- External floor mounting bracket provides fast installation on datacenter. The floor anchoring bracket is designed to support rack installations to concrete slab or steel beams





NEBS GR-63-CORE compliancy

- The seismic kit is verified in NEBS Independent Testing Laboratory (ITL) to fulfill NEBS GR-63-CORE issue 4.
- The Open Rack v2 with seismic kit is proven to comply with highest Zone-4 criteria with Nokia 42OU Open Rack. Total rack load was 2020 lbs (916kg) during test with Nokia server configuration.

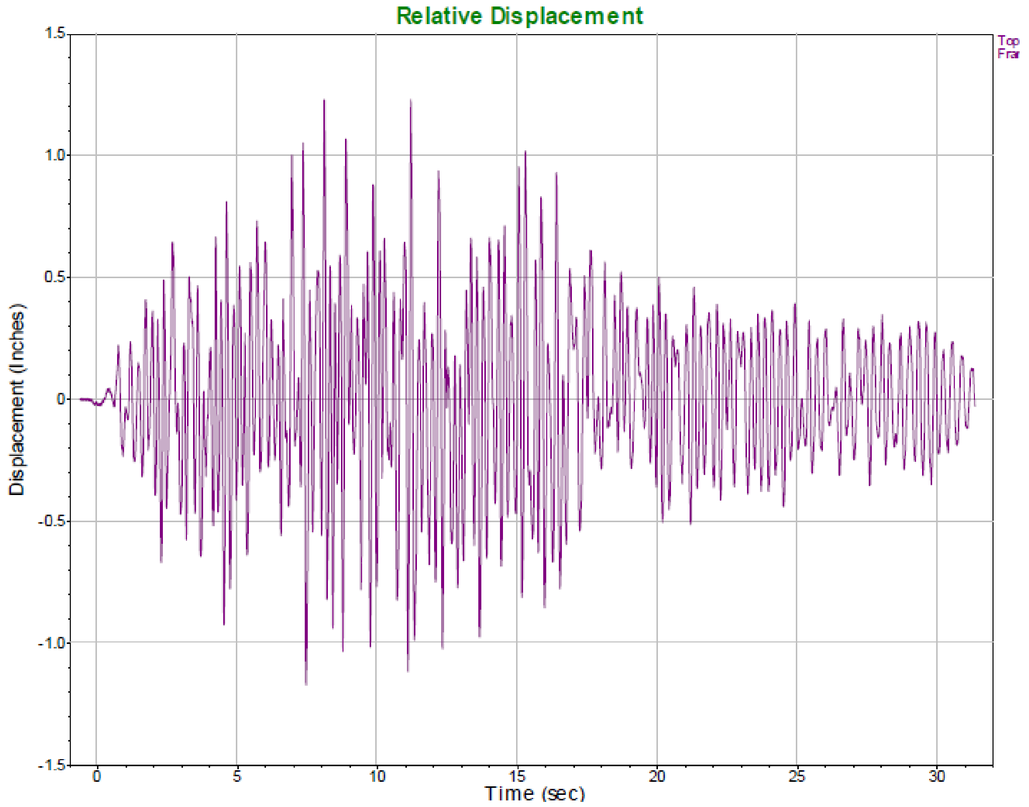
NTS

ENGINEERING SUCCESS

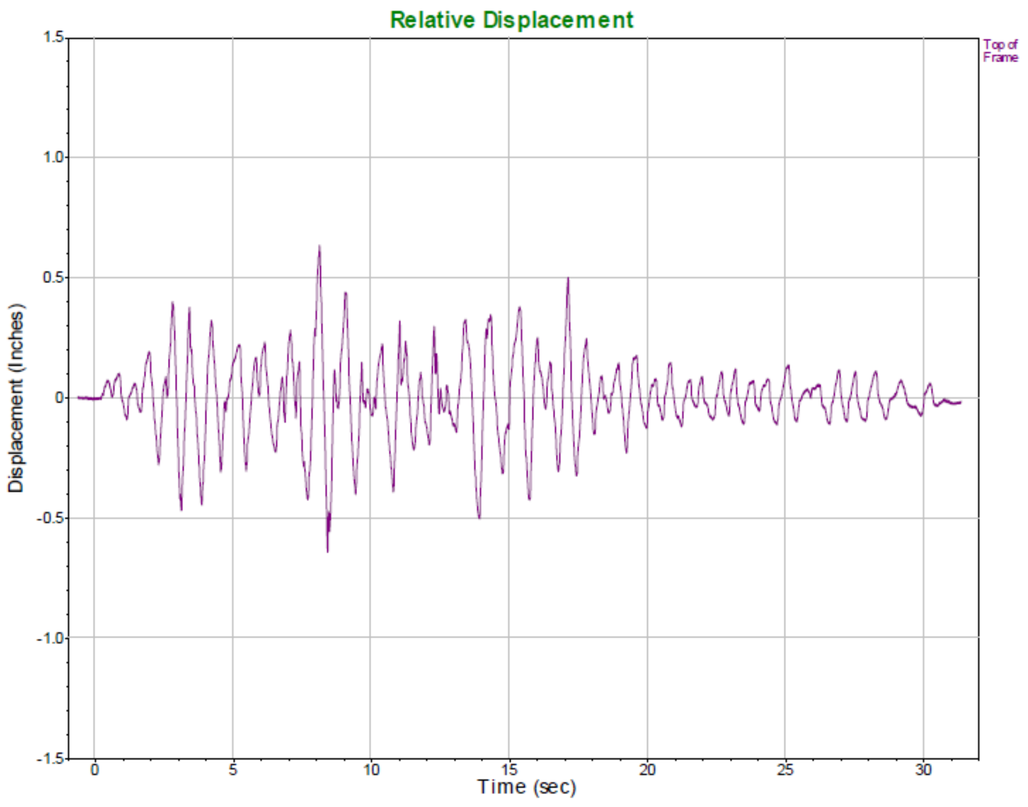
Test Results

Open rack fulfilled all NEBS Physical and functional performance requirements without any problems.
Typically most challenging NEBS criteria : The maximum single amplitude deflection at top of the framework relative to the base shall not exceed 3 in

Y-axis (side to side displacement)



X-axis (front to rear displacement)



Draft specification and models for review

http://files.opencompute.org/oc/public.php?service=files&t=69e0a59035da52ca5bfd56376607df16

Targeting to the approval on April IC meeting and target to have available on OCP marketplace later this year. Please visit Nokia Booth B6 explore the seismic solution for Open Rack

Thank You

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