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# Detachable Cushions for Heavy Server/Storage Enclosures

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**Title:**

Detachable Cushions for Heavy Server/Storage Enclosures

**Abstract:**

A cushion design that allows service representatives, end users, and manufacturing partners to move the server/storage enclosure, fully populated, out of the packaging without manually lifting the server/storage enclosure.

The new design will allow manufacturing partners to leave all assemblies installed, reducing the manufacturing processing time/costs and reducing risks of shipping errors. In addition the new design will save the need for additional packaging and shipping costs. In prior designs, assemblies needed to be removed and shipped in separate packaging.

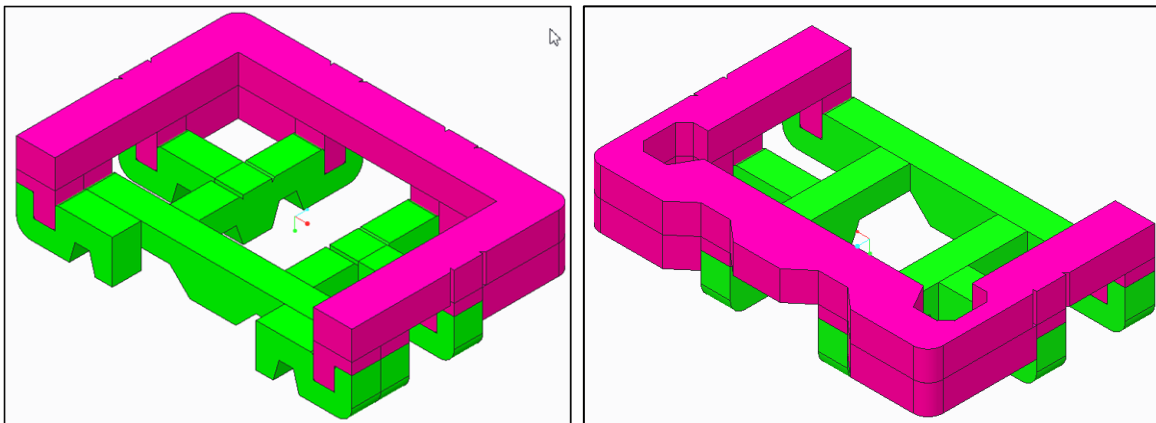
A proof of concept was completed with field installation and manufacturing contacts. The results were very positive. The product could be removed from the packaging easily.

Key benefits of the design are:

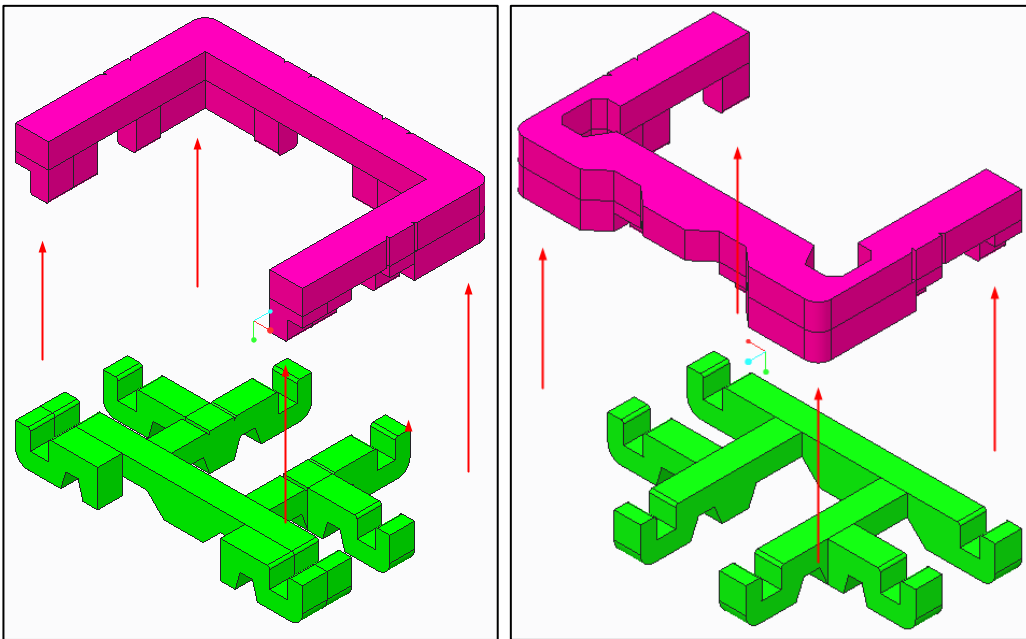
- 1) Reduce packaging cost
- 2) Reduce manufacturing processing time
- 3) Simpler solution for installers to remove the enclosure from the packaging

**Contents:**

- The pre-detached cushions used in server/storage packaging to protect server/storage enclosure during shipping.



- The design/features make the cushions manually detachable in the manufacturing or end customer/field.

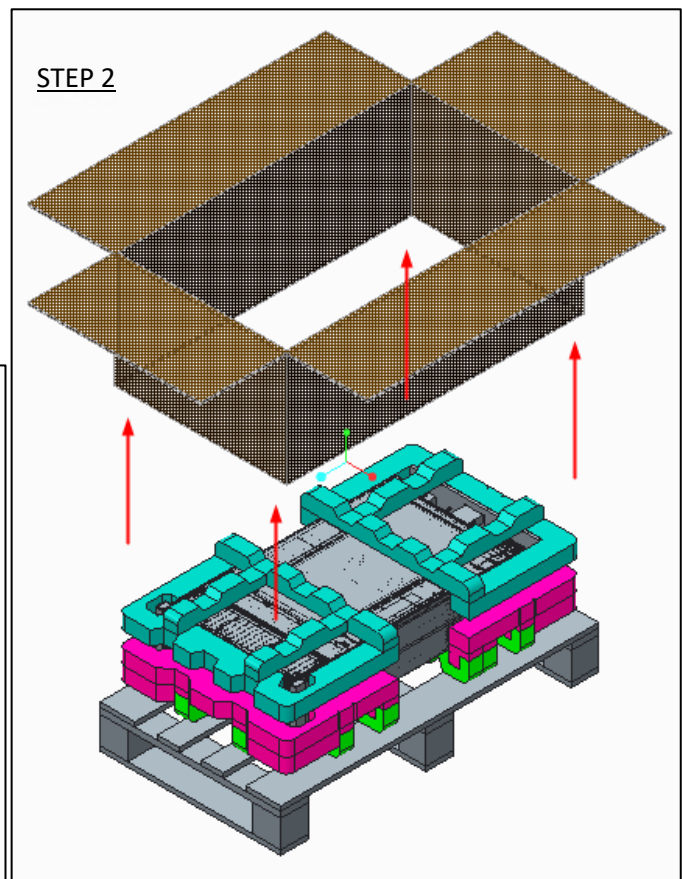
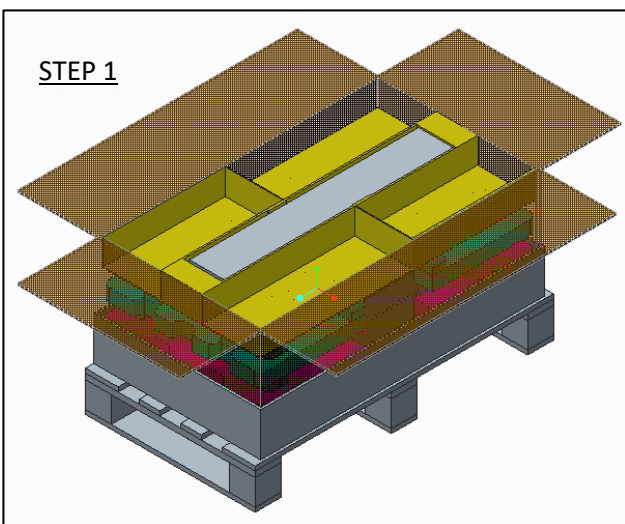


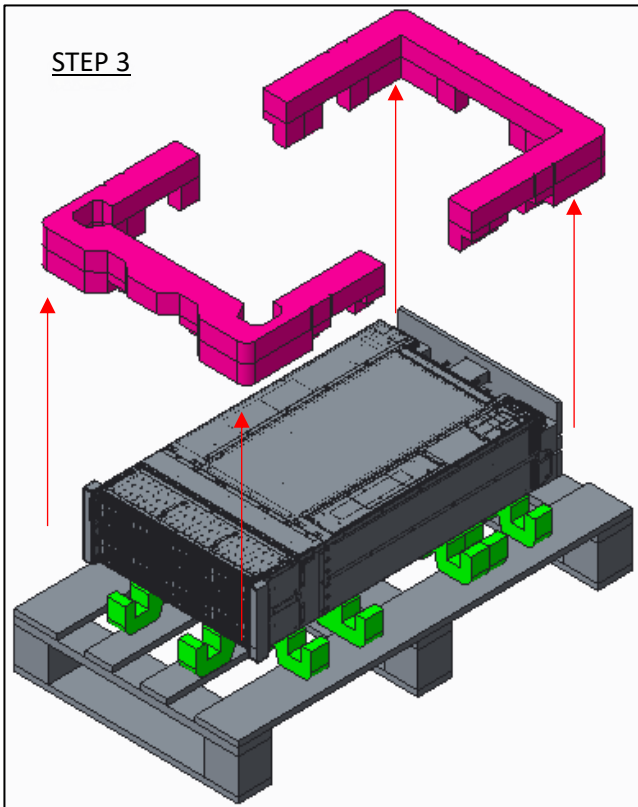
- Thus the heavy server/storage enclosure could be moved out of the packaging without manually lifting the machine – thus greatly minimizing the manpower required by manufacturing and at the customer/field installation.

**How the disclosure works:**

**Step 1 & 2**

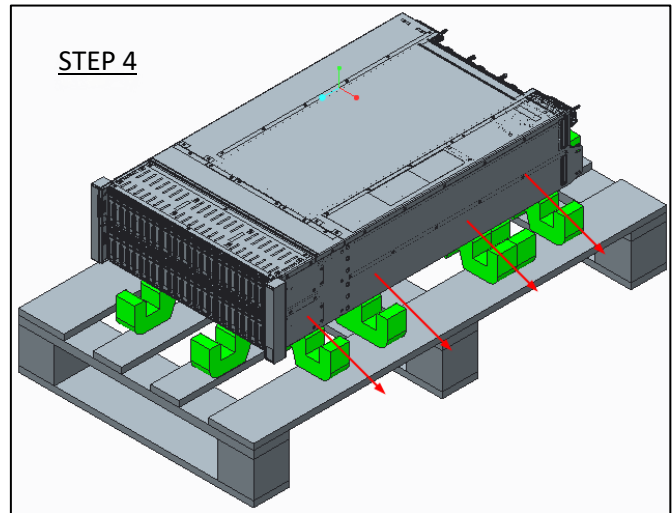
- Open the box and remove both the top accessory tray and the HSC carton.
- Remove Top cushion (light blue).





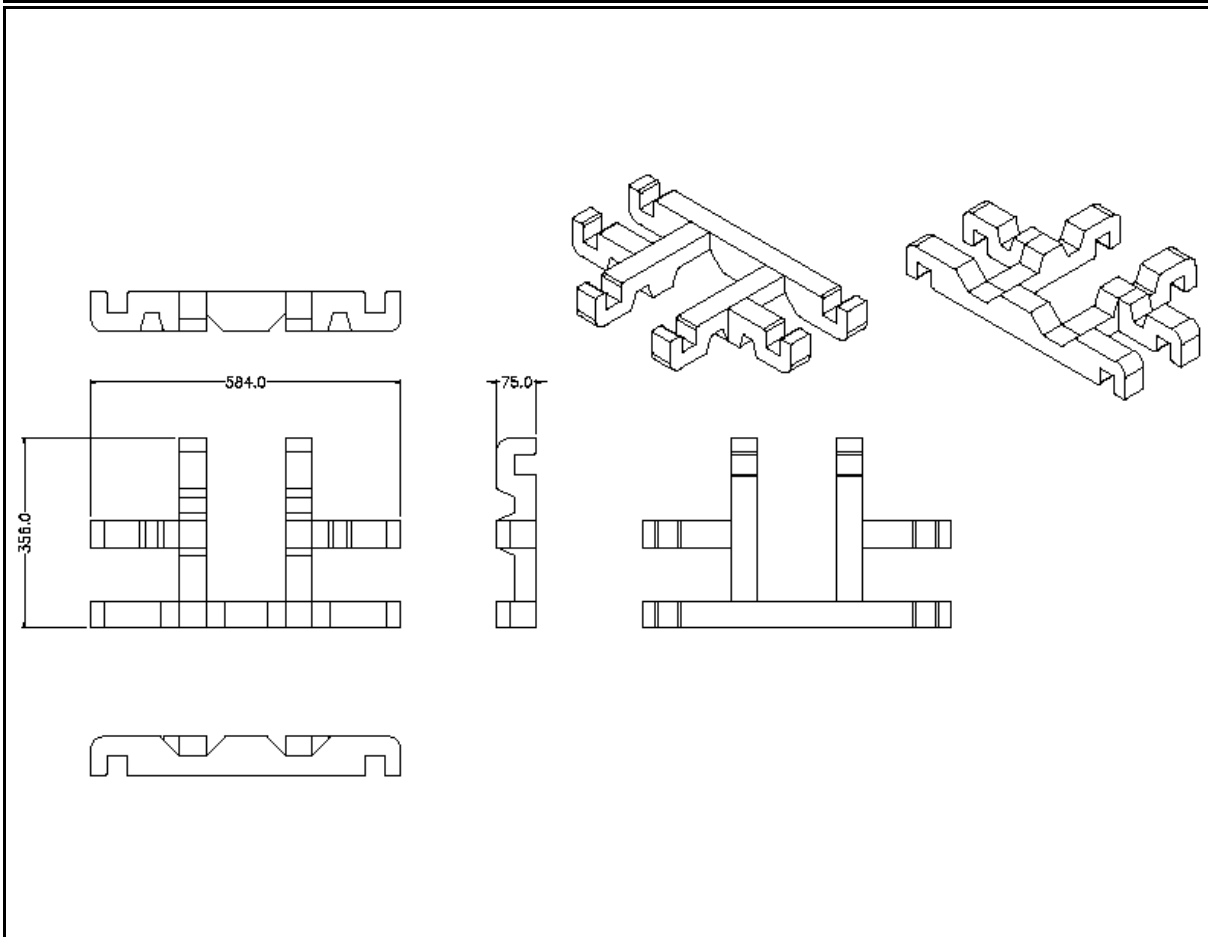
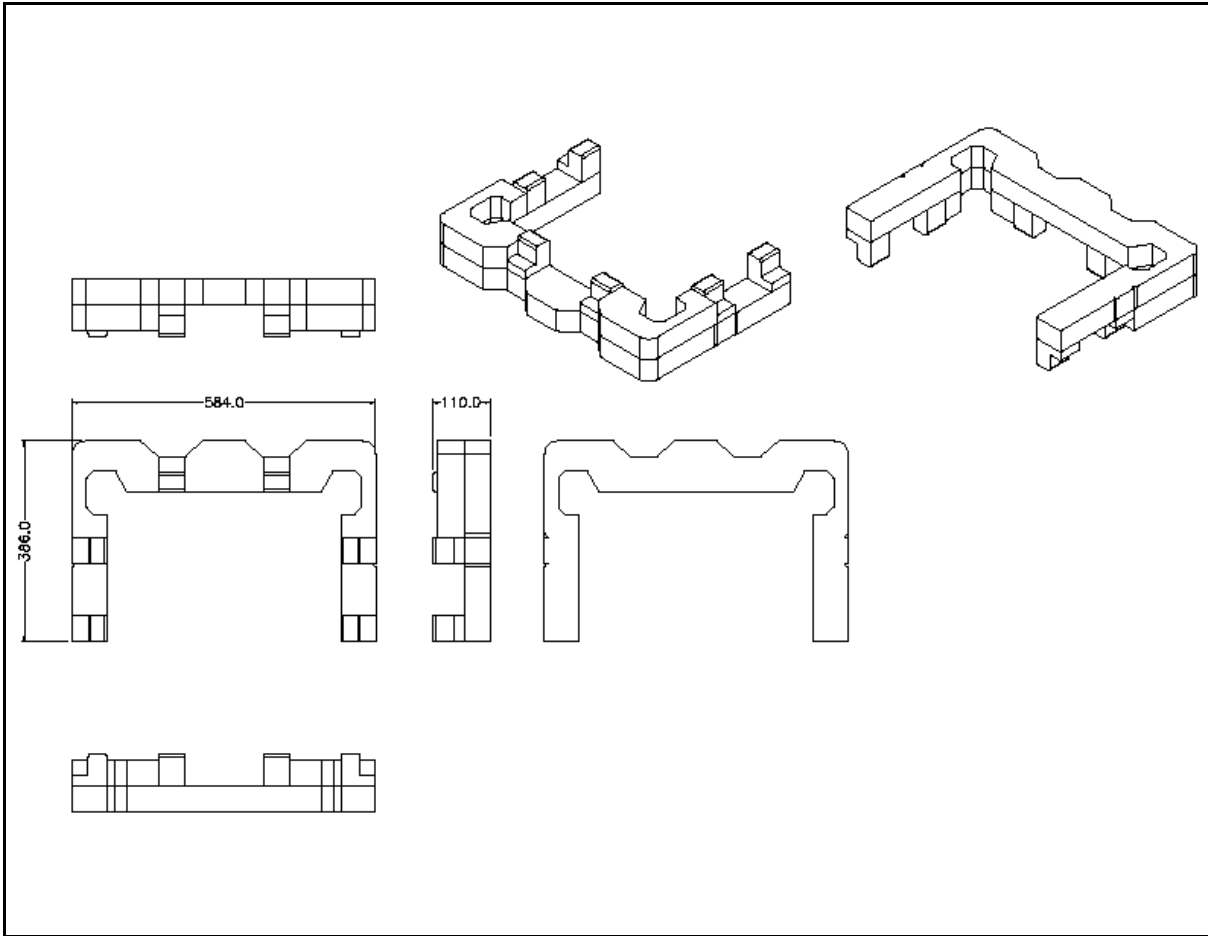
**Step 3 & 4**

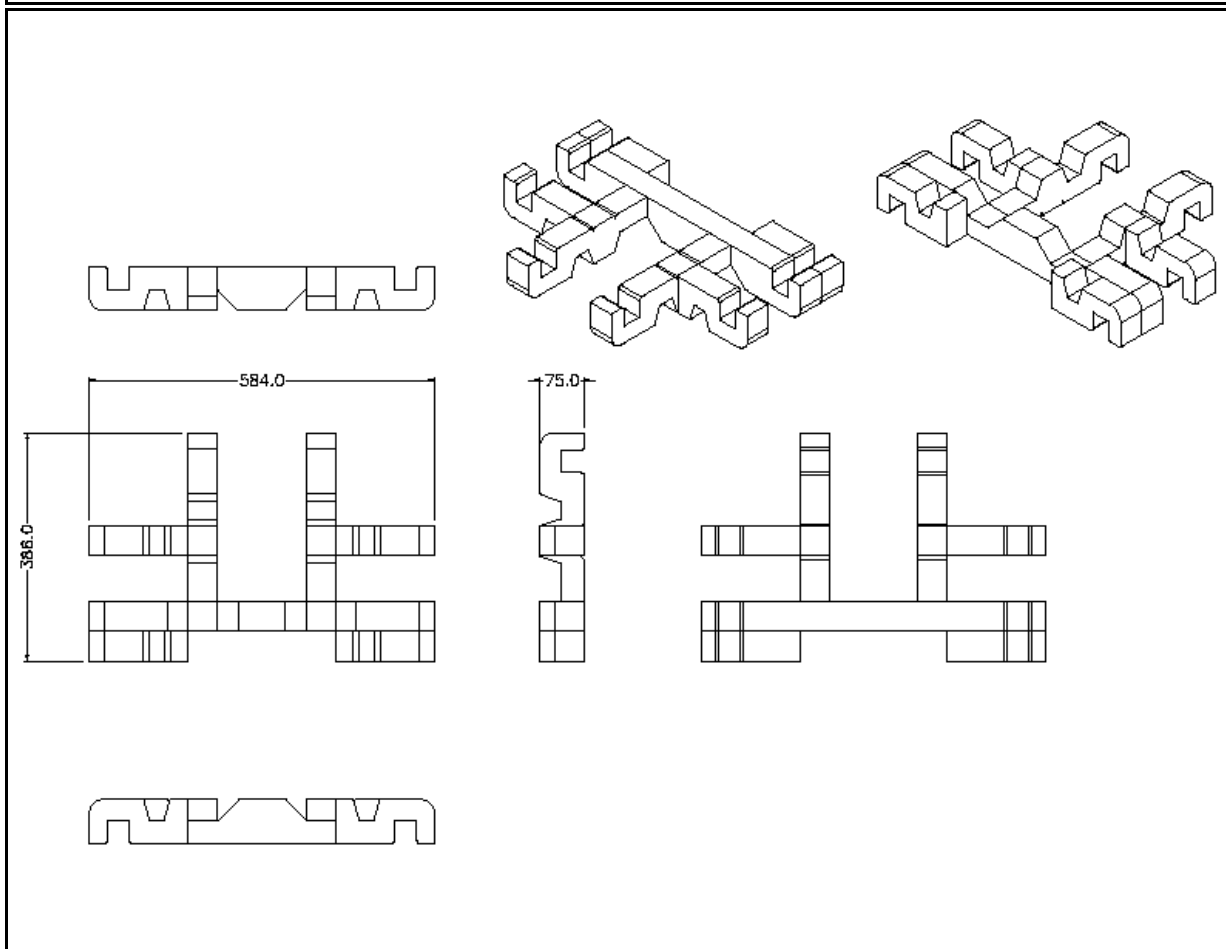
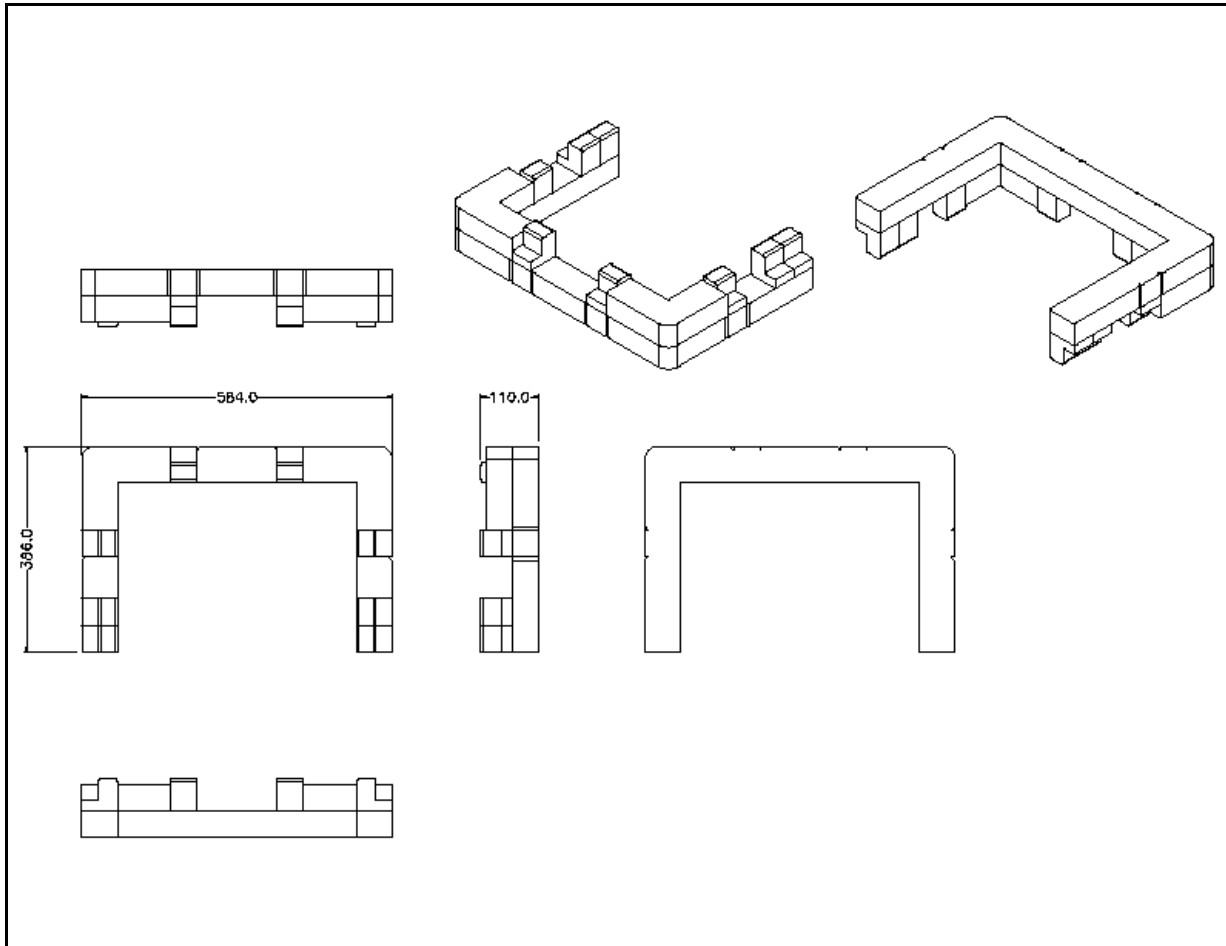
- Manually pull up the detachable cushions (magenta).
- Slide the server/storage enclosure out of packaging to a data center lift (or equivalent) directly.



In addition, instructions will be added to the top of the packaging carton to instruct the user with the unpacking steps.

**Disclosure Engineering Specifications:**





Disclosed by Clarence Ma and Andy Charles – Hewlett Packard Enterprise