Cantilever Work Sheet

LOAD

1. Describe the load: What is Product? Example: Plywood / Bundles of Pipe / Loose Aluminum Extrusion

2. Length _______________________ Width ______________________ Height ______________________

3. Weight per bundle: ________________________________________________

4. How many arms will be required to support load without deflection? __________________________

ARMS

5. Inclined (20 degree incline)_________

6. Straight (3/8” per foot pitch to compensate for deflection)_________

7. Straight Arm w/lip___________

8. Pipe Sockets? ___________

9. Length of Arm? _________

10. Capacity per Arm?__________ (# 3 divided by # 4) _________________________________

UPRIGHTS

11. Single Sided__________

12. Double Sided___________

13. Height _____________ (Determined by forklift ht / ceiling ht / etc) Base length is determined by arm length…included with upright.

14. Base + how many arm levels? ____________

15. Brace Length: ____________ (Determined by length of material divided by the # of uprights = brace length) 24, 36, 42, 48, 60, 72, 84, 96 Braces are on center of uprights.
WPR Cantilever Rack Design Sheet

Personally Design a Cantilever Rack System to meet your Load Requirements.

Storage Information per Application:

Intended Load.
1. Length:
2. Depth:
3. Height:
4. Weight:
5. Horiz. Arm Spacing:

Typical Cantilever Loading Frequency.
Customer must distribute the ‘load’ (weight) evenly across (over) the number of arms used to support it.
The overhang should equal 1/2 the column spacing.
This will assure even loading on all arms.

Load Deflection.
Determine number of Columns (Uprights).
Load deflection is characterized as the sagging of the load between the arms. Space blocks on the floor at an equal distance apart under the load until you have no sagging. Each block represents one arm. The arm will be connected to the upright to support the load.

For safe loads with two-arm support, the distance between the arms should be 1/2 the load and length.

Arm Selection.
1. Divide the total weight by the number of arms, as required.
2. Match the load capacity required with the appropriate arm length and select proper arm from table. Arm length should equal load depth.

Correct Placement
Incorrect Placement

For your convenience:
- Contact West Point Rack for current arm and base dimensions.
- Check limitations at your plant, such as ceiling clearance and fork lift height.
- Top arm level must be below the top of Stanchion.

Upright Capacity.
Do not exceed upright capacities. Count the number of arms to be used on upright; find arm capacity on ‘spec sheet’ and multiply by number of arms per upright.

Determine Upright Height:
Start with base height.
- number of storage levels x’s load height,
- handling clearance (4’ to 6’) x’s number of levels,
- number of arm levels x’s arm thickness
- Upright Height

Arm Loading.
All capacities are based on uniformly distributed load.

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