

- 8** Rack Width W
is equal to the width of all the cartons on one tier plus 2" clearance per carton.
ie., $W = [\text{average carton width} + 2"] \times L$

CONDITION: The calculated W must be less than its space limitation in the building (between columns or obstructions, etc.) If not, the system must be broken down into smaller racks.

- 9** Height of the Rack Column C
is equal to the top tier height plus one inch per foot of rack depth D (a conservative allowance for the pitch of all the rails).

ie., $C = H \text{ (inches)} + [D \times 1] \text{ (inches)}$

CONDITION: C + height of tallest carton on top tier + 2" clearance must be less than the ceiling limitations in that area of the rack. If not, a compromise between the track depth, top tier height and number of tiers must be refigured from Step 2

- 10** Rail Span S
Using maximum unit carton weight U
NOTE: The selected value must be divisible into the working rack depth D (Step 2).

| Table 10 | |
|--|----------------------|
| Max. "U" From Step 1 (Allowable load) lbs/ft | Rail Span "S" (Feet) |
| 6 | 14 |
| 9 | 12 |
| 16 | 10 |
| 48 | 7 |
| 75 | 6 |
| 130 | 5 |
| 206 | 4 |
| 364 | 3 |

- 11** Tier Weight T
represents the total load acting on the rail cross-beam and is a function of maximum carton weight, rail span and the number of lanes in the bay.

ie., $T = U \text{ max.} \times S \times [\text{desired number of lanes in bay}]$

- 12** Bay width B
NOTE: Bay width must be divisible into rack width W (Step 8).

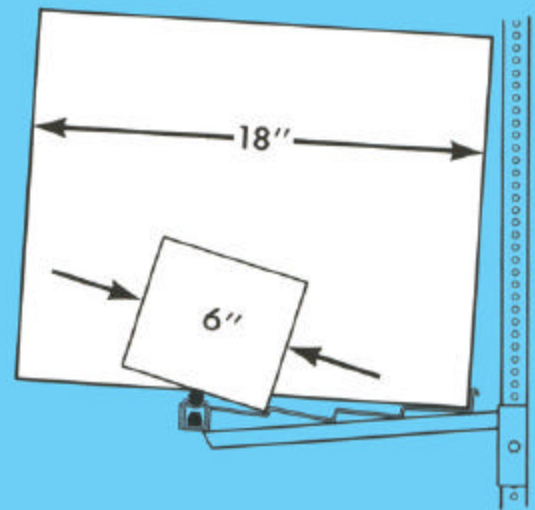
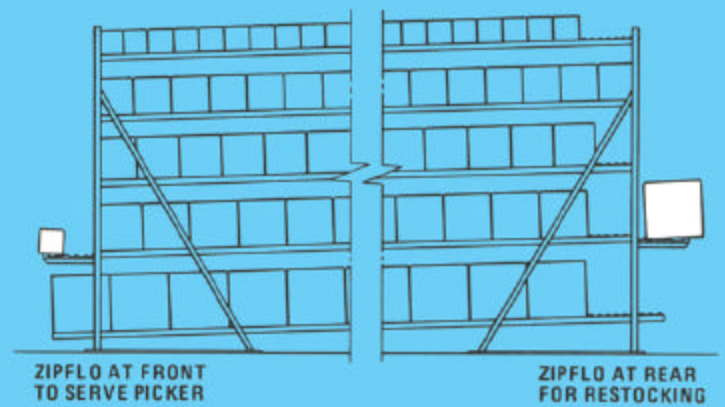
| Table 12 | | |
|--|------------|------------------------|
| Max. "T" From Step 11 (Allowable load) LBS | | Bay Width "B" (inches) |
| Standard | Heavy Duty | |
| 1445 | 1826 | 24 |
| 963 | 1217 | 36 |
| 723 | 913 | 48 |
| 484 | 610 | 60 |
| 336 | 424 | 72 |
| 247 | 311 | 84 |
| 189 | 238 | 96 |
| 149 | 188 | 108 |
| 121 | 153 | 120 |

- 13** Rail Style & Wheel Spacing
Standard Cartonflo rails are available with wheels mounted on one or both sides, spaced at 2", 3", 4", 5", and 6" centers. The proper wheel spacing is one which is less than 1/3 of the length of the shortest box to be stored. In special cases, where the bottom surface of the item is hard and flat, the spacing can be increased to a dimension less than 1/2 of the item length. When determining wheel spacing, check the wheel loading table below to be sure that the load per wheel dose not exceed the recommend

| Style of Rail | Capacity Per Wheel (lbs.) | | |
|------------------|---------------------------|-------------|--------------------|
| | Ctns. Dry | Ctns. Humid | Hard Surf'd. Items |
| 2" Plastic Wheel | 10 | 5 | 25 |
| 2" Steel Wheel | 8 | 4 | 50 |
| 1½" Steel Wheel* | 5 | 2 | 25 |

* Recommended for special applications only.

Zipflo Conveyor



Tilt Front Picking Shelf

