# Welter Storage "Basic" Selective Pallet Rack School

Pallet Rack design can be a complicated process. It's important to figure out the needs and physical limitations of your business before investing in a pallet rack system. The following information outlines the information needed for purchasing the proper racking. By printing this article and filling in the blanks, you will be prepared to answer the questions you will be asked when ordering your custom pallet rack system.

## Step 1. Length of Beam

Maximum width of pallet or load (whichever is larger)

Number of pallets or loads across (between upright frames)\_\_\_\_\_

Allow 3" between upright frame and loads.

Allow 4" between loads

Example: Allow 10" for two across storage.

Total length of beams (Max load width plus allowance)

The clear distance between posts will be beam lengths plus space between plate and columns.



#### Load Types

This diagram shows how to measure pallet Loads.



A) Depth of pallet or load
B)Width
C) Height
D) Total Height (load and pallet)
E) Pallet Stringer
Dimension
F) Total Weight (load plus pallet)

## Step 2. Beam Capacity



\* Minimum Required Capacity per pair of Beams – Levels

# Step 3. Frame Depth and Spacers

**Frame depth** A). should be @ 6" less than pallet stringer length (see "Pallet Guide below)

Frame Dimension\_\_\_\_\_

# Row Spacers, Wall Fixes & Wire Decking

\* Please email or call for more information





# Pallet Guide A: Depth (Stringer Length)

B: Width (Board Length) C: Height

### Step 4. Frame Upright Height

To determine Height of Frames Needed, Starting at floor level:

Add height of pallet and load combined, Plus 9" Total\_\_\_\_\_

Multiply total times the number of shelf levels Levels X\_\_\_\_\_

=\_\_\_\_\_ to equal *Frame Height* 

A) Load Height B) Lift Area C) Beam Face



Rack is required to go only as high as is necessary to support top pallets. Height may also be limited by the extent of fork elevation of lift truck. Provide a minimum of 6"between top load and ceiling obstructions. (Check local fire codes)

## Step 5. Frame Upright Capacity

Add total of load weight per Level

Determine maximum vertical shelf spacing

See diagram (x)

Determine number of levels per bay\_\_\_\_\_

\* Welters will figure Frame Capacity based on information provided above

