Pallet Storage, Ordinary Technology

There are three common types of pallet storage methods:

1. Block stacking
2. Single deep pallet racks
3. Double deep pallet racks

Block stacking

This is the simplest method, with pallets stacked on the floor. The number of pallets in a stack depends on the product and on fire insurance guidelines, but is generally between 2 and 5.

If each stack is to be accessible, we will use 1-deep bays. This results in back-to-back rows in a typical application, shown in the floor plan below:

If large quantities of each product are to be stored, we can arrange pallets in bays several pallets deep. A floor plan for 3-deep bays (back-to-back) is shown below:
FLOOR PLAN FOR 3 - DEEP BLOCK STACKING
Storage Lane Depth Options
(a) Initial Honeycombing for Full Product Lot
(15 Pallet Loads, 3 Lanes Required)

(b) Honeycomb as Lot is Depleted
(13 Pallet Loads, 3 Lanes Required)

(c) Still later:
More Honeycombing
(10 Pallet Loads, 2 Lanes Required)

Honeycomb Loss for Block Stacking
(a) Side view

(b) Top view

Block Stacking Storage Lanes
VERTICAL HONEYCOMBING

(FOR EXAMPLE) FLOOR CAPACITY = 500 POUNDS PER SQUARE FOOT.

UNUSED CUBE

(RECOVERED SPACE)

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Figure 7-4
Case I Storage-Retrieval Distribution
ONE STACK—50" x 52"—18.06 S.F.
ONE FACING—72" x 52"—26.00 S.F.
SINGLE-DEEP RACK

One Section—107" x 105"—78.02 S.F.
Single-Deep Racks
One Section-157" x 105"-114.48 S.F.
Double-Deep Racks