Building paper or housewrap

Space decking about 1/4"

Deck boards bark side up

Deck joists connect to ledger with joist hangers

Flashimg installed on top of deck boards with caulking under and fastened close together along the outside edge

Expansion anchors in masonry. Bolts or lag screws in framing

Figure 29-1
Drill hole  Insert expansion bolt  Tighten

Angle brace  Post

Figure 29-3
Frost depth for your location plus 6"

2 x 6 Form for top

2 #4 Reinforcing rods pushed into soil at bottom of excavation

2"–3" of 1" Crushed stone

Concrete footing

Slightly dome top

Galvanized post anchor

Diameter

Frost depth for your location plus 6"

12"
Secure anchors to stakes

Anchor post to footing or place securely in ground

Fasten post to temporary anchor with nails

Plumb posts each way

Temporary anchor

Figure 29-7
A. Excavate vertical hole to proper depth

B. Place granular material and post in hole. Plumb in all directions while backfilling

C. Backfill and compact around post. Verify post is plumb
Decking:
- 2 x 4 or 5/4s cedar, redwood or treated
- spaced 3/16" apart
- use deck screws

Joists:
- size depends on span
- nail or use joist hangers

Beams:
- size depends on load & span, typically
  a grab beam or a double beam
  fastened on top of post, use treated lumber
- bolt to post or use special connector

Posts:
- typically 4 x 4 treated, can be buried in concrete
  to frost depth or set on precast support

Alternative post connection with beam setting on top of post:

Figure 29-12
Joists:
- hung inside framing, use joist hanger

Beams:
- outside joists function as beams
- bolt to post
Top of the post is set below the top of the ledger at dimension equal to the thickness of the joist plus the beam, plus any desired cross-slope.

Figure 29-14
Figure 29-15

T connection of beam to post

Saddle connection of beam to post
Hanger

Rim joists

Bolts

Ledger

Same height as top of ledger minus any cross-slope

Posts

Figure 29-18
The "W" system of bracing

W bracing

Another effective bracing system

Angle bracing

"X" bracing adds considerable strength to the structure

Cross bracing

Figure 29-21
Bark side

Annual rings

1/4" R.

Pith side

3-1/2", 4-1/2", 5-1/2"

Radius edge decking

Figure 29-25
Post

Cleat to support surfacing at post

Joist

Maintain spacing between surface boards

Deck surfacing

Surfacing should be placed at a 45° to 90° angle across joists

End should rest on joist

Stagger ends

Figure 29-27
Figure 29-28
2 Deck screws per board. Place approx. 1" in from each edge. Center over joist.