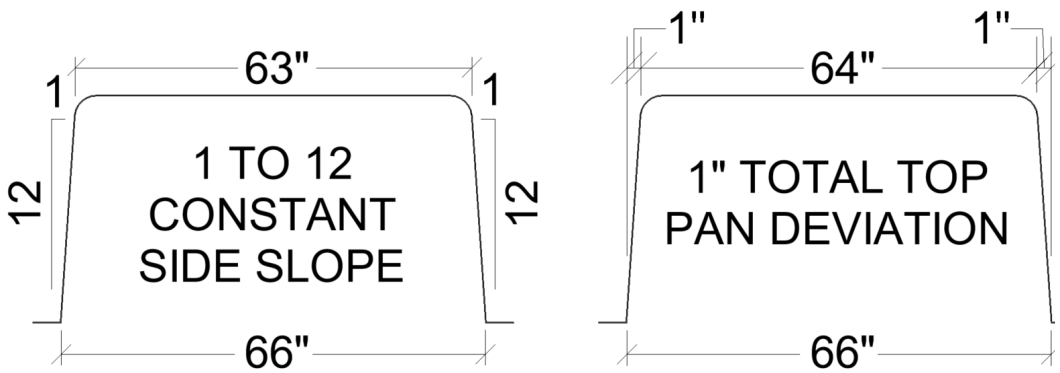
Pan Tips: The Basics

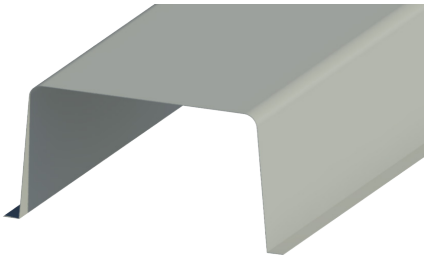
Pan Form construction is an efficient method of creating structural beam and slab framing. Efficiency results from using standard size pan forms widely available in the industry.

Pans are fabricated from 14-gauge steel and are reinforced to carry the weight of the concrete during placement plus the added weight of reinforcing steel, equipment, and workers. Depending on the manufacturer, the sides of pans either have a constant slope of 1:12 or a total top of pan deviation of 1" regardless of depth. Pans have evolved from shallow depths and widths of 20". We are grateful for the adaptations and innovation that led us from narrow pan joist to the more efficient wide module construction.

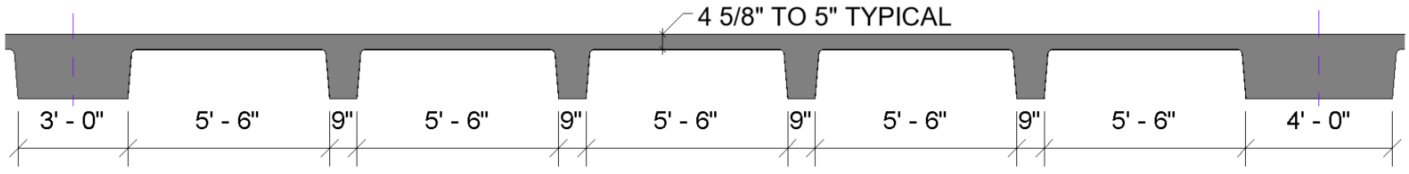
A 20"X66" WIDE MODULE VOID WILL HAVE EITHER ONE OF THESE PROFILES:



The profile type is immaterial as the slope is there to facilitate the pan removal operation. Pans are nailed to form decks to hold them in place during concrete placement. For most pan depths, steel diaphragms will be placed inside the voids to support the sides during concrete placement. Voids are created by placing end caps, diaphragms, and a series of overlapping pans to the length required. All these materials are repeatedly placed and removed by workers as the project progresses. Re-use of material is part of the economy of pan construction.



A cut section through a typical wide module pan job with 36" beams on one side and 48" beams on the other will look like this. The 9" joist are beams evenly spaced between support members that give rigidity to the structure.



Projects constructed with wide module pans are one of the most cost effective ways of executing beam and slab framing. Conventional beam and slab construction includes plywood beamsides and framing material for slab soffits. Pans placed on a form deck soffit create the beam sides and slab soffit all at once. We like to say that when placing pans you get your beamsides for free!