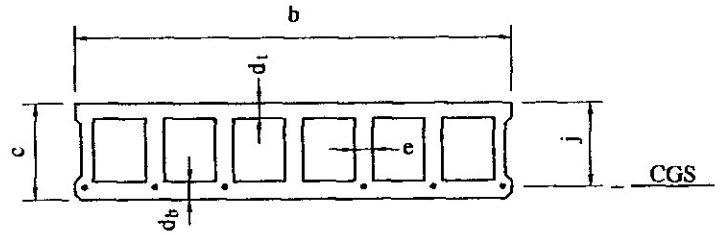
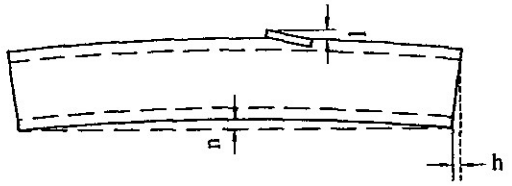
Fig. 1.8.1 Product tolerances – hollow core slabs

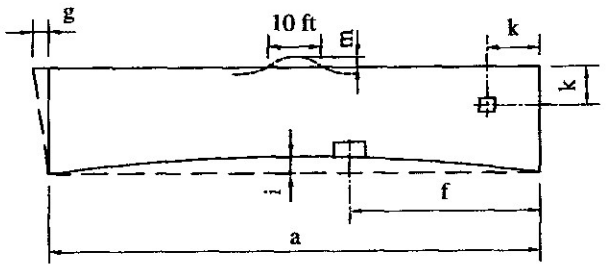
a = Length ..... $\pm 1/2$ in
b = Width ..... $\pm 1/4$ in
c = Depth ..... $\pm 1/4$ in
d_t = Top flange thickness
Top flange area defined by the actual measured values of average d_t x b shall not be less than 85% of the nominal area calculated by d_t nominal x b nominal.
d_b = Bottom flange thickness
Bottom flange area defined by the actual measured values of average d_b x b shall not be less than 85% of the nominal area calculated by d_b nominal x b nominal.
e = Web thickness
The total cumulative web thickness defined by the actual measured value Σe shall not be less than 85% of the nominal cumulative width calculated by Σe nominal.
f = Blockout location ..... ±2 in
g = Flange angle ..... $1/8$ in per 12 in, $1/2$ in max.
h = Variation from specified end squareness or skew ..... $\pm 1/2$ in
i = Sweep (variation from straight line parallel to centerline of member) ..... $\pm 3/8$ in
j = Center of gravity of strand group
The CG of the strand group relative to the top of the plank shall be within $\pm 1/4$ in of the nominal strand group CG. The position of any individual strand shall be within $\pm 1/2$ in of nominal vertical position and $\pm 3/4$ in of nominal horizontal position and shall have a minimum cover of $3/4$ in.
k = Position of plates ..... ±2 in
l = Tipping and flushness of plates ..... $\pm 1/4$ in
m = Local smoothness ..... $\pm 1/4$ in in 10 ft (does not apply to top deck surface left rough to receive a topping or to visually concealed surfaces)
Plank weight
Excess concrete material in the plank internal features is within tolerance as long as the measured weight of the individual plank does not exceed 110% of the nominal published unit weight used in the load capacity calculation.
n = Applications requiring close control of differential camber between adjacent members of the same design should be discussed in detail with the producer to determine applicable tolerances.



CROSS SECTION



ELEVATION

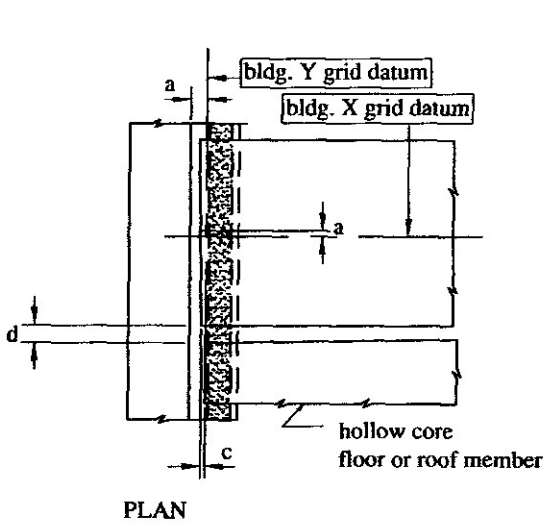


PLAN

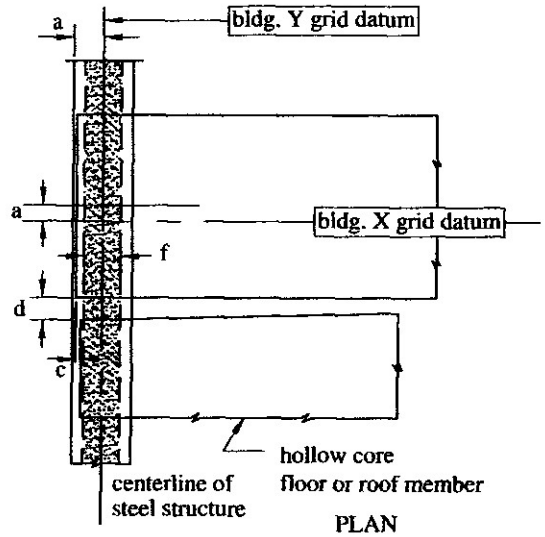
Fig. 1.8.2 Erection tolerances - hollow core floor and roof members

a	=	Plan location from building grid datum	± 1 in
a_1	=	Plan location from centerline of steel*	± 1 in
b	=	Top elevation from nominal top elevation at member ends	
		Covered with topping	± 3/4 in
		Untopped floor	± 1/4 in
		Untopped roof	± 3/4 in
c	=	Maximum jog in alignment of matching edges (both topped and untopped construction)	1 in
d	=	Joint width	
		0 to 40 ft member length	± 1/2 in
		41 to 60 ft member length	± 3/4 in
		61 ft plus	± 1 in
e	=	Differential top elevation as erected	
		Covered with topping	3/4 in
		Untopped floor	1/4 in
		Untopped roof**	3/4 in
f	=	Bearing length*** (span direction)	± 3/4 in
g	=	Differential bottom elevation of exposed hollow-core slabs****	1/4 in

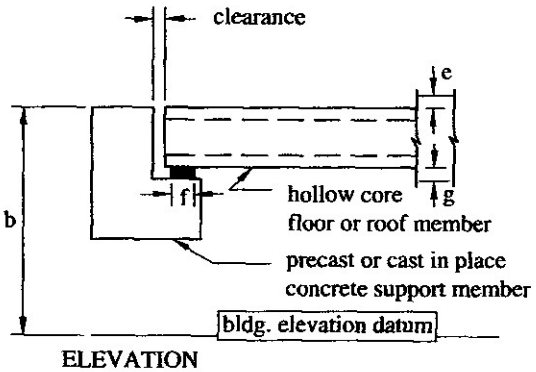
* For precast concrete erected on a steel frame building, this tolerance takes precedence over tolerance on dimension "a".
** It may be necessary to feather the edges to ± 1/4 in to properly apply some roof membranes.
*** This is a setting tolerance and should not be confused with structural performance requirements set by the architect/engineer.
**** Untopped installation will require a larger tolerance here.



PLAN

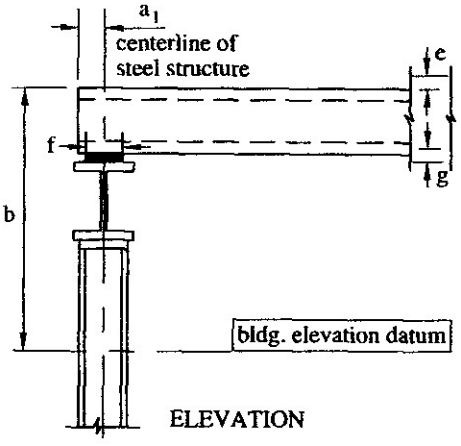


PLAN



ELEVATION

Precast element to precast or
cast-in-place concrete or masonry



ELEVATION

Precast element to structural steel