Design Aid 3.13.5. Partial Interaction Curves for Precast, Reinforced Concrete Solid and Insulated Wall Panels
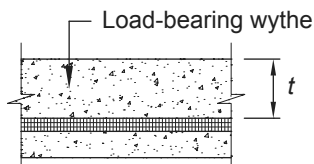
3

$t/2$

t = 4 in. or 6 in.

$1\frac{1}{2}$ in.

t = 8 in. or 10 in.
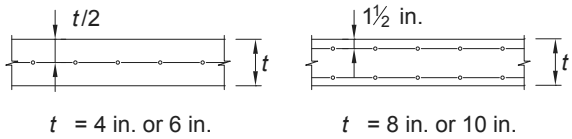
Curves based on minimum vertical reinforcement

ρ = 0.10%

f'_c = 5000 psi normalweight concrete

f_y = 60,000 psi

	Full interaction curve data			
t, in.	ϕP_o	ϕP_{nb}	ϕM_{nb}	ϕM_c
4	134	67	5.5	0.5
6	202	100	12.4	1.0
8	269	131	22.6	1.8
10	336	164	35.5	2.8

Units for ϕP are kip, units for ϕM are kip-ft.

Values are for 1 ft width.

t
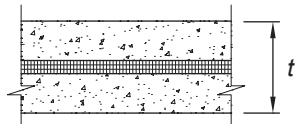
Fully composite
sandwich panel

Load-bearing wythe

t

Partially composite or
noncomposite