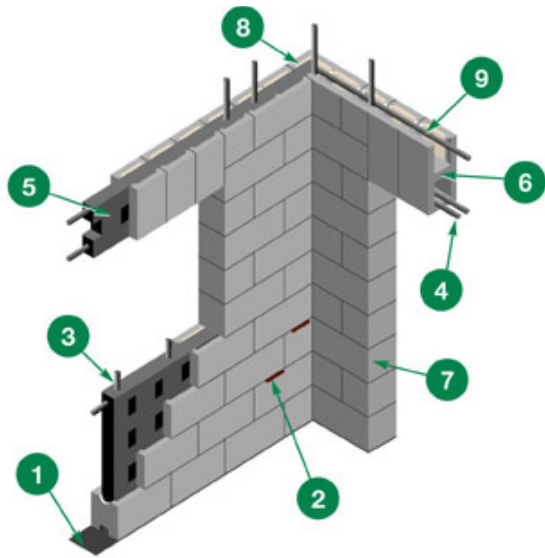


Durisol

CONCRETE WALL FORMING SYSTEM



1. Optional Mortar Bed

It is recommended that the first course of Durisol Wallforms be set in a ½" bed of mortar. It is also possible to substitute mortar with other leveling materials, if desired. This leveling bed will allow the first course to be set perfectly level and make the construction of subsequent courses easier, and faster. All other courses are dry-stacked (without mortar).

2. Leveling Shims

Since there is no mortar between the courses of Wallforms, it will become necessary to compensate for variations between individual Wallform units. It is recommended that every second or third course is leveled as you build, using any one of the following:

- Conventional cedar shims from your local hardware store
- Specialty plastic shims that may be available in your area
- Conventional masonry mortar
- Spray foam or construction adhesive
- Using coarse thread screws (deck screws) to screw the units together (vertically and horizontally). Conventional nails can also be used.

3. Wall Reinforcing

The steel rebar schedule for each wall is project specific and must be designed by a professional engineer.

4. Lintel Reinforcing

Steel rebar over openings is project specific and must be designed by a professional engineer.

5. Concrete Fill

Typical Concrete designs range between 17 MPa – 25 MPa (2500 psi – 3600 psi) and use a max 3/8" aggregate size. Download our construction specification document for more information.

6. Lintel Form (Cut on-site)

Lintel Wallforms are created on-site by removing the webs from a conventional Square End unit and turning the block 90 degrees so that the closed end is on the bottom.

7. Square End Form

These units are used at the sides of openings to prevent concrete from pouring out during construction. These units are not always necessary and it is also acceptable to use Standard units (without a closed end) in conjunction with conventional wood bucks to frame the openings. Download our Tech guide for details.

8. Corner Form

Corner Forms are specially notched to allow the concrete to flow around the corner into the adjacent wall. Most units measure 24" x 12" to maintain the desired 12" module. Refer to our Product Dimensions for more information

9. Insulation Inserts

All insulation inserts are manufactured from rockwool mineral fibre insulation. We do not use any polystyrene in our products whatsoever.

DURISOL WALL FORM SYSTEM

STANDARD WF
DIMENSIONS AND AVAILABILITY

Updated:

May 2007

Wall System Summary

The following Tables summarize the Wall Forms and overall wall systems that are possible using the standard Durisol Wall Forms.

Wall Form Types and Availability (Nominal Dimensions)

Wall Form Shape	Size (height x length)	AVAILABILITY				
		6" WF	8" WF	10" WF	12" WF	14" WF
Standard 3 Core	(12" x 36")	x	✓	✓	x	x
L - Corner (2 Core) ¹	(12" x 24")	x	✓	✓	x	x
Corner (Modified End)	(12" x 24")	✓	x	x	✓	✓
End (2 Core)	(12" x 24")	x	x	x	x	✓
Split/End (2 Core)	(12" x 24")	x	✓	✓	✓	x
Standard 2 Core	(12" x 24")	✓	x	x	✓	✓

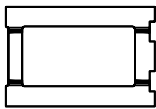
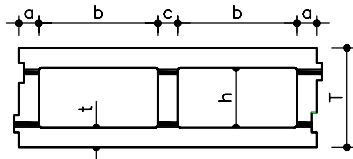
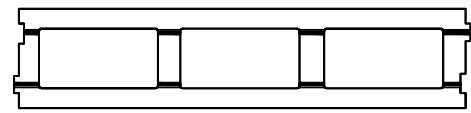
¹ All Corner Wall Forms are L-shaped with 12" return. Since the WF30 system has a thickness of 12" , the corner unit is a modified End Unit.

Wall System Summary

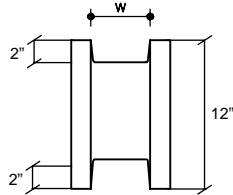
Wall Thickness	R-Value	Concrete Thickness (in)	Concrete Fill Vol. (yd ³ / ft ²)	Total Weight of Wall (lb / ft ²)	Application
6"*	8	3 1/8	0.0078	27	Above Grade
8"	8	4 3/4	0.0123	35	Above Grade
10"	8	6 3/4	0.0179	46	Above & Below Grade
10"	14	5 1/4	0.0140	41	Above Grade
12"	8	8 1/2	0.0217	56	Above & Below Grade
12"	14	7	0.0186	50	Above & Below Grade
12"	21	5 1/2	0.0146	47	Above Grade
14"	8	10 3/8	0.0265	69	Above & Below Grade
14"	14	9	0.0225	62	Above & Below Grade
14"	21	7 1/2	0.0186	55	Above & Below Grade
14"	28	5 1/2	0.0140	46	Above Grade

* 6" WF is not typically intended for use as a load-bearing wall.

Standard Wall Forms (Imperial)

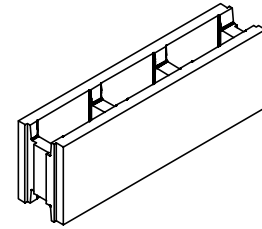


Plan View

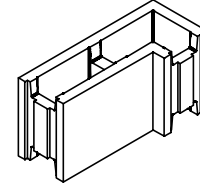


Section

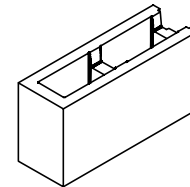
Standard - 3 Core
(8" & 10" WF only)



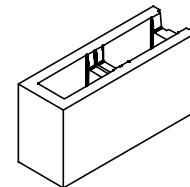
L - Corner
(8" & 10" WF only)



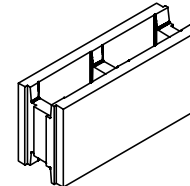
End
(14" WF only)



split/End = 2 Half Form
(8", 10", 12" WF only)



Standard - 2 Core
(6", 12", 14" WF only)



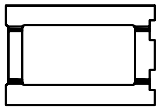
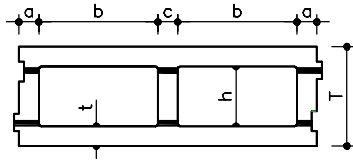
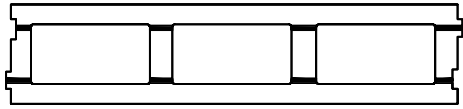
* Configuration of horizontal interlock varies among Wall Form types

Standard Wall Form Schematic

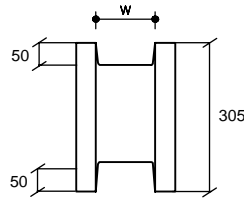
Standard Wall Form Dimensions (Imperial)

Wall Form Type	Wall Form Weight (lbs)	FORM DIMENSIONS							CONCRETE CORE DATA	
		T (in)	t (in)	a (in)	c (in)	w (in)	b (in)	h (in)	X-Sect Area (in ²)	Fill Volume (yd ³ / ft ²)
6" WF	16	5 7/8	1 3/8	1 7/8	1 3/4	3 1/4	9 1/8	3 1/8	28.5	0.0078
8" WF	33	7 7/8	1 5/8	1 3/4	1 1/2	4 3/8	9 1/2	4 3/4	44.3	0.0123
10" WF	40	10	1 3/4	1 3/4	1 3/4	6 3/4	9 1/2	6 3/4	64.1	0.0179
12" WF	31	12	1 3/4	1 3/4	1 3/4	8 1/2	9 3/8	8 1/2	79.7	0.0217
14" WF	38	14	1 3/4	2	1 3/4	10 3/8	9 1/8	10 3/8	94.5	0.0265

Standard Wall Forms (SI)



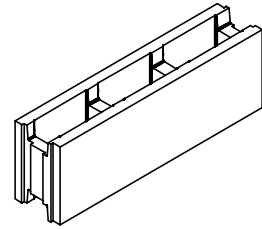
Plan View



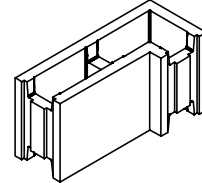
Section

* Configuration of horizontal interlock varies among Wall Form types

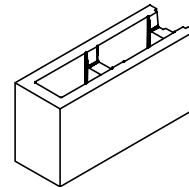
Standard - 3 Core
(8" & 10" WF only)



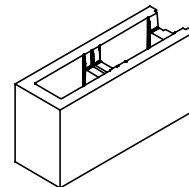
L - Corner
(8" & 10" WF only)



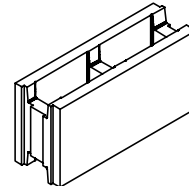
End
(14" WF only)



split/End = 2 Half Form
(8", 10", 12" WF only)



Standard - 2 Core
(6", 12", 14" WF only)

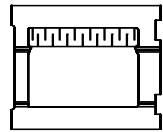
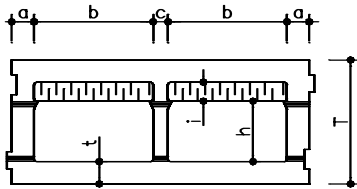
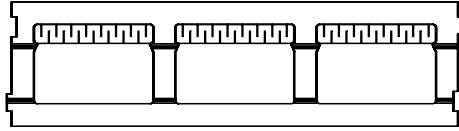


Standard Wall Form Schematic (SI)

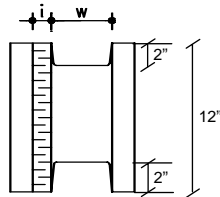
Standard Wall Form Dimensions (SI)

Wall Form Type	Wall Form Weight (kg)	FORM DIMENSIONS							CONCRETE CORE DATA	
		T (mm)	t (mm)	a (mm)	c (mm)	w (mm)	b (mm)	h (mm)	X-Sect Area (mm ²)	Fill Volume (m ³ / m ²)
6" WF	8	150	35	46	46	80	233	80	18650	0.064
8" WF	15	200	40	43	38	120	238	120	28000	0.101
10" WF	18	255	42	45	45	172	242	172	41500	0.147
12" WF	14	305	45	45	45	216	238	216	51400	0.178
14" WF	17	360	45	51	48	265	232	265	61500	0.217

Thermal Wall Forms (Imperial)

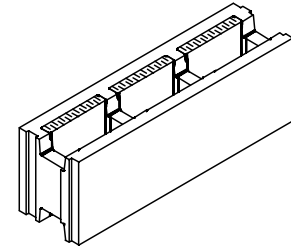


Plan View

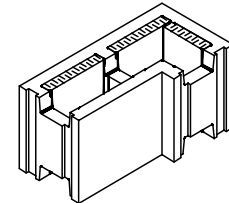


Section

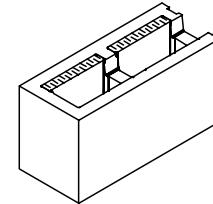
Standard - 3 Core
(8" & 10" WF only)



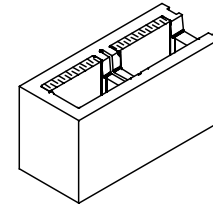
L - Corner
(8" & 10" WF only)



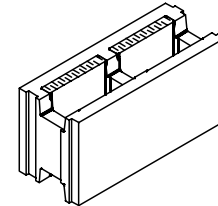
End
(14" WF only)



split/End = 2 Half Form
(8", 10", 12" WF only)



Standard - 2 Core
(6", 12", 14" WF only)



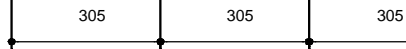
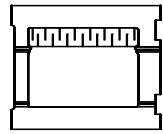
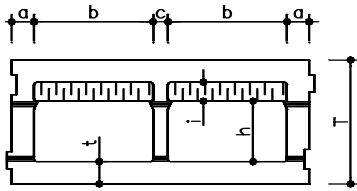
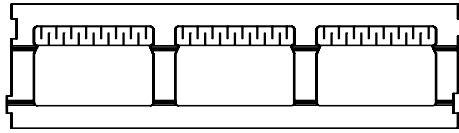
* Configuration of horizontal interlock varies among Wall Form types

Thermal Wall Form Schematic

Thermal Wall Form Dimensions (Imperial)

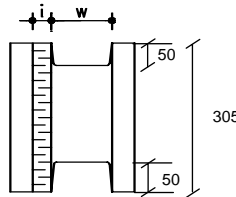
Wall Form Type	Wall Form Weight (lbs)	FORM DIMENSIONS								CONCRETE CORE DATA	
		T (in)	t (in)	a (in)	c (in)	w (in)	i (in)	b (in)	h (in)	X-Sect Area (in ²)	Fill Volume (yd ³ / ft ²)
10" WF (R-14)	43	10	1 3/4	1 3/4	1 3/4	5 1/4	1 1/2	9 1/2	5 1/4	49.9	0.0140
12" WF (R-14)	35	12	1 3/4	1 3/4	1 3/4	7	1 1/2	9 3/8	7	65.6	0.0186
12" WF (R-21)	39	12	1 3/4	1 3/4	1 3/4	5 1/2	3	9 3/8	5 1/2	52.3	0.0146
14" WF (R-14)	39	14	1 3/4	2	1 3/4	9	1 1/2	9 1/8	9	82.1	0.0225
14" WF (R-21)	41	14	1 3/4	2	1 3/4	7 1/2	3	9 1/8	7 1/2	68.4	0.0186
14" WF (R-28)	44	14	1 3/4	2	1 3/4	5 1/2	5	9 1/8	5 1/2	50.2	0.0140

Thermal Wall Forms (SI)



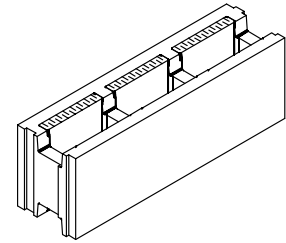
Plan View

* Configuration of horizontal interlock varies among Wall Form types

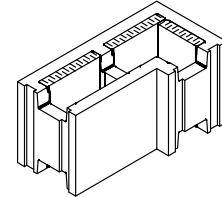


Section

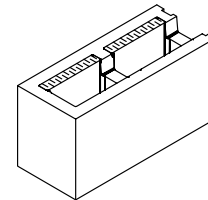
Standard - 3 Core
(8" & 10" WF only)



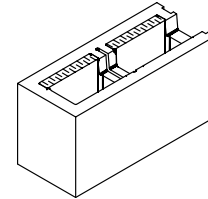
L - Corner
(8" & 10" WF only)



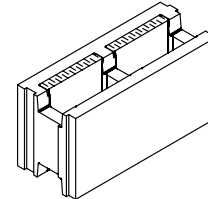
End
(14" WF only)



split/End = 2 Half Form
(8", 10", 12" WF only)



Standard - 2 Core
(6", 12", 14" WF only)



Thermal Wall Form Schematic (SI)

Thermal Wall Form Dimensions (SI)

Wall Form Type	Wall Form Weight (kg)	FORM DIMENSIONS (mm)								CONCRETE CORE DATA	
		T	t	a	c	w	i	b	h	X-Sect Area (mm ²)	Fill Volume (m ³ / m ²)
10" WF (R-14)	20	254	45	45	45	133	38	241	133	32100	0.115
12" WF (R-14)	18	305	45	45	45	178	38	238	178	42300	0.153
12" WF (R-20)	19	305	45	45	45	140	76	238	140	33700	0.120
14" WF (R-14)	19	360	45	51	48	227	38	232	227	52650	0.185
14" WF (R-21)	20	360	45	51	48	190	76	232	190	44100	0.153
14" WF (R-28)	21	360	45	51	48	138	127	232	138	32100	0.115