



ROMAN COLUMNS INC.

In ancient times temples were considered a place of gathering and that is why ancient man had beautified them with columns.

Like the Romans and the Greeks, we at Roman Columns feel the same way and that is why each of our posts are crafted to the exact standards as our forefathers.

In his book, The Five Orders of Architecture, Giacomo Barozio Da Vignola would have Certainly been proud of us.....

Built from the ground up with only the Finest choices of materials available....all to Insure that your project will last a life time...

Products built for a life time.....

Tel:416-255-8151 Fax:416-642-0512

48 Newcastle st, Toronto, Ontario, M8Y 1A3

www.romancolumnsinc.com

Products Built for A Lifetime.....

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Put us to the test.....

From the Classic million dollar homes of the downtown corridor to the newly developed subdivisions in the suburbs.....to foreign markets and countless Hollywood feature films, our columns have been meeting the most exacting standards for many years!

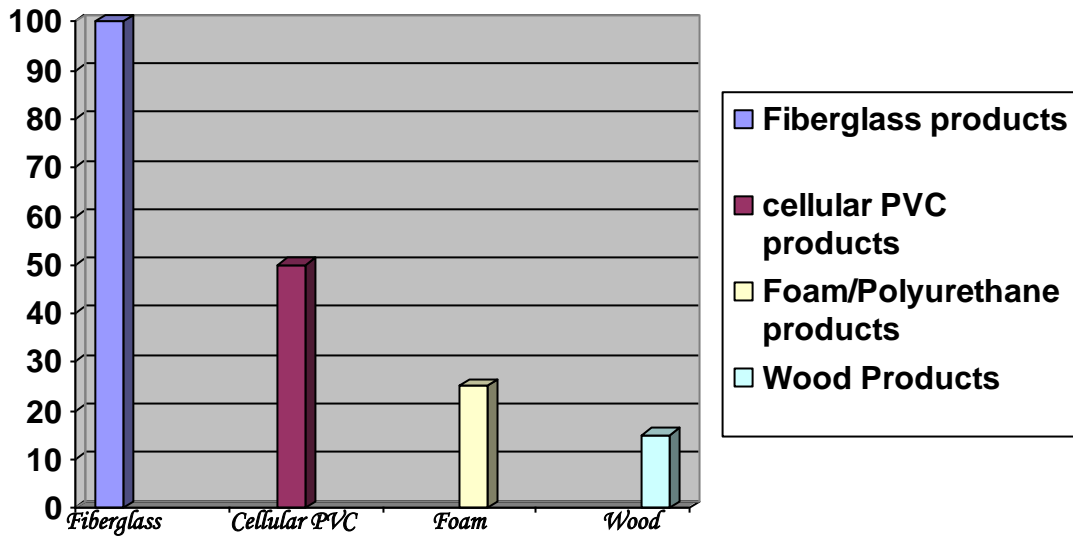
.....So, why put us to the test?

Our stringent production and quality control measures and our tradition of careful detailing ensure that your project will endure for years to come.

Secrets to Longevity.....

In a fast paced world today we at Roman Columns understand the need for free time and time worth enjoying with family and friends. This is why we have a firm and staunch belief of producing products that are made for a lifetime... We have expanded and concentrated on those products to ensure beauty and ever lasting preservation with little to no maintenance.....

Life expectancy



Meeting Your Needs.....

Established in 1998 ROMAN COLUMNS INC. has grown to be a Canadian leader in the manufacturing of both wood and fiberglass columns. Starting with just 3,000 sq feet Roman Columns has grown to the present day with over 20,000 sq ft of manufacturing space.



- **HOURS OF OPERATION:**
8:00 a.m. to 5:00 p.m. Monday to Friday and faxed Orders 24 hour service
- **WARRANTY:**
In addition to basic warranty, Roman Columns provides Recommendations to ensure years of beauty and durability.
- **ON TIME DELIVERY:**
Roman Columns own fleet of vehicles ensures Control over delivery schedules. Also all freight is pre-paid within the defining areas.
- **QUALITY METRICS:**
Quality control elements are overseen at every phase of production. This ensures that each of your projects will endure for a lifetime.
- **ACKNOWLEDGEMENT OF ORDERS:**
All orders are acknowledge within 24 hours of receipt and are processed for quick shipping.
- **PACKAGING:**
All columns shipped are either wrapped or boxed with a hi grade single phased corrugate to minimize freight and handling damage.
- **PRODUCT KNOWLEDGE:**
All employees and customer service reps undergo Extensive product line training.
- **WORLD-WIDE RELATIONS:**
Relationships with countless companies around the world.

Our goal is simple, we wish to be a world leader in column manufacturing while maintaining that family run business ethics.



Enduring The Elements.....



ROMAN FIBERGLASS COLUMN COLLECTION:

With some of the most harsh and diverse weather systems in the world, Roman Columns has offered it's customers a product that is far more superior than any other product line available in our market place. Roman Columns proudly features its own line of fiberglass columns. We are also proud to say that we are the first Canadian fiberglass column manufacturer.

Pound for pound nothing on the market place can with stand the strength and durability of our fiberglass columns. **LIGHT WEIGHT** and **LESS FRAGILE** do to its unique composition. **RIGID, STRONG, IMPERVIOUS TO MOISTURE AND INSECT INFESTATION** are reason for making fiberglass a wise choice.



NON-TAPERED SQAURE:



- Square non-tapered columns comes standard 6", 8" and 10" up to 24' in length
- Columns come standard with a Tuscan style cap and base, all of which are made from a high quality rigid polyurethane foam. Caps and bases are also pre-primed.
- Constructed of re-enforced fiberglass polymer, columns are load bearing on their own and are capable of carrying up to 10,000 lbs.
- Columns are virtually maintenance free and are impervious to our harsh elements.
- Columns are light weight, easy to install and are paintable.
- We are so confident in ou product that we back it with a 15 year limited warranty.



SIZE	LENGHT	PRICE
5 1/2"	5'	
7 1/4"		
9 1/2"		
5 1/2"	6'	
7 1/4"		
9 1/2"		
5 1/2"	8'	
7 1/4"		
9 1/2"		
5 1/2"	9'	
7 1/4"		
9 1/2"		
5 1/2"	10'	
7 1/4"		
9 1/2"		
5 1/2"	12'	
7 1/4"		
9 1/2"		
7 1/4"	14'	
9 1/2"		
7 1/4"	16'	
9 1/2"		
7 1/4"	18'	
9 1/2"		



Standard Tuscan cap



Optional Tuscan cap
w/ astragal built in

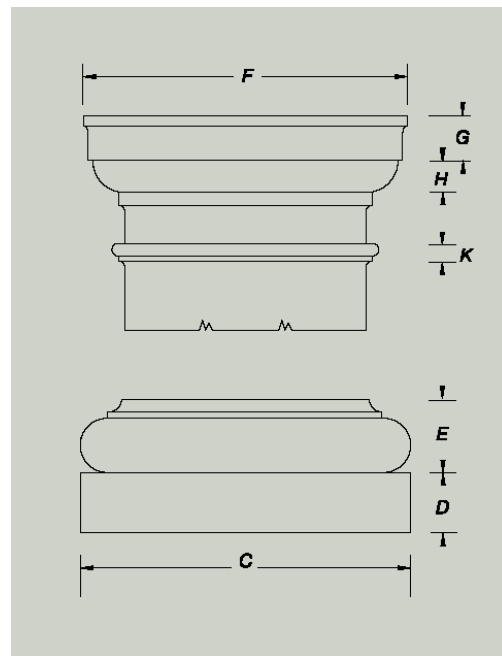
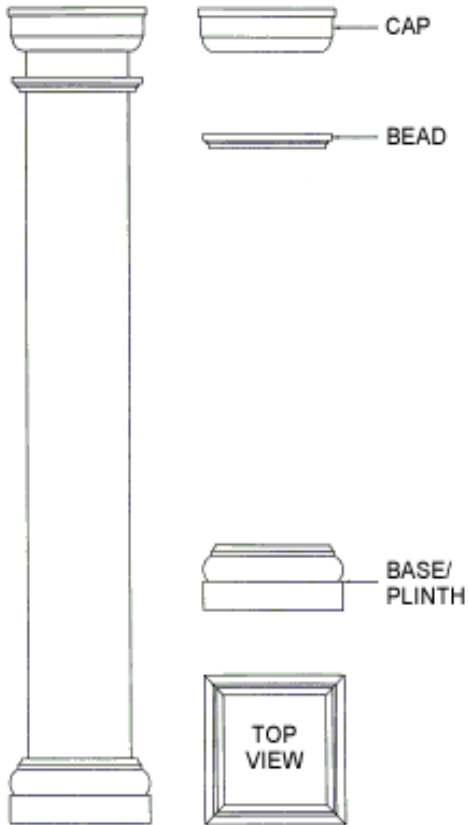


Standard Tuscan base



Optional 8"
Skirt base

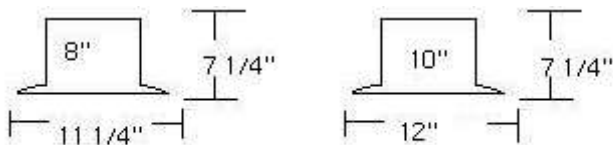
**NON TAPERED
SQUARE FIBERGLASS COLUMN:**



COL SIZE	SHAFT SIZE	C	D	E	F	G	H	K
6"	5 1/2"	8 1/2"	1 1/2"	1 3/4"	8"	1 1/16"	7/8"	1"
8"	7 1/4"	11 1/8"	2 1/4"	2 3/4"	10 3/8"	2"	1 1/2"	1 1/2"
10"	9 3/8"	12 3/4"	2 1/2"	3 1/2"	12 3/4"	1 3/4"	1 1/2"	1 1/2"

column size	maximum load bearing	inside diameter
6	8,000 lbs	5"
8"	10,000 lbs	6 3/4"
10"	12,000 lbs	8 3/4"

OPTIONAL SKIRT BASE SETS:



The Prestige Series:

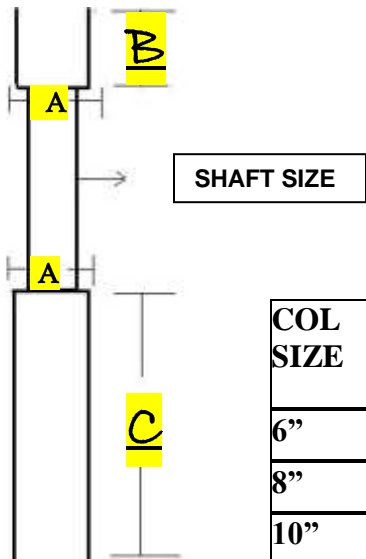


Going out of our way to give you more choices....it's what we do best.....Roman Columns is now proud to bring you the Prestige series of columns....if you're tired of the norm or of simplicity then the prestige series is for you.....shafts manufactured from fiberglass and pvc components each of our posts is light weight, easy to install and virtually maintenance free. Offering you sizes of 6", 8" and 10". Extended skirts, fluted, recessed panel, raised panel, paneled column with mouldings. One of our Prestige columns will certainly accent your home to your desired needs.



VICTORIAN SQUARE FIBERGLASS COLUMN WITH 42" BOTTOM SKIRT & 16" TOP:

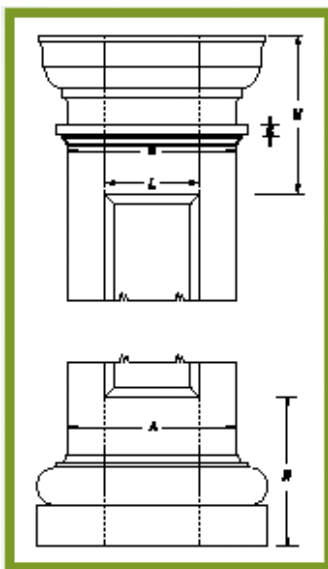
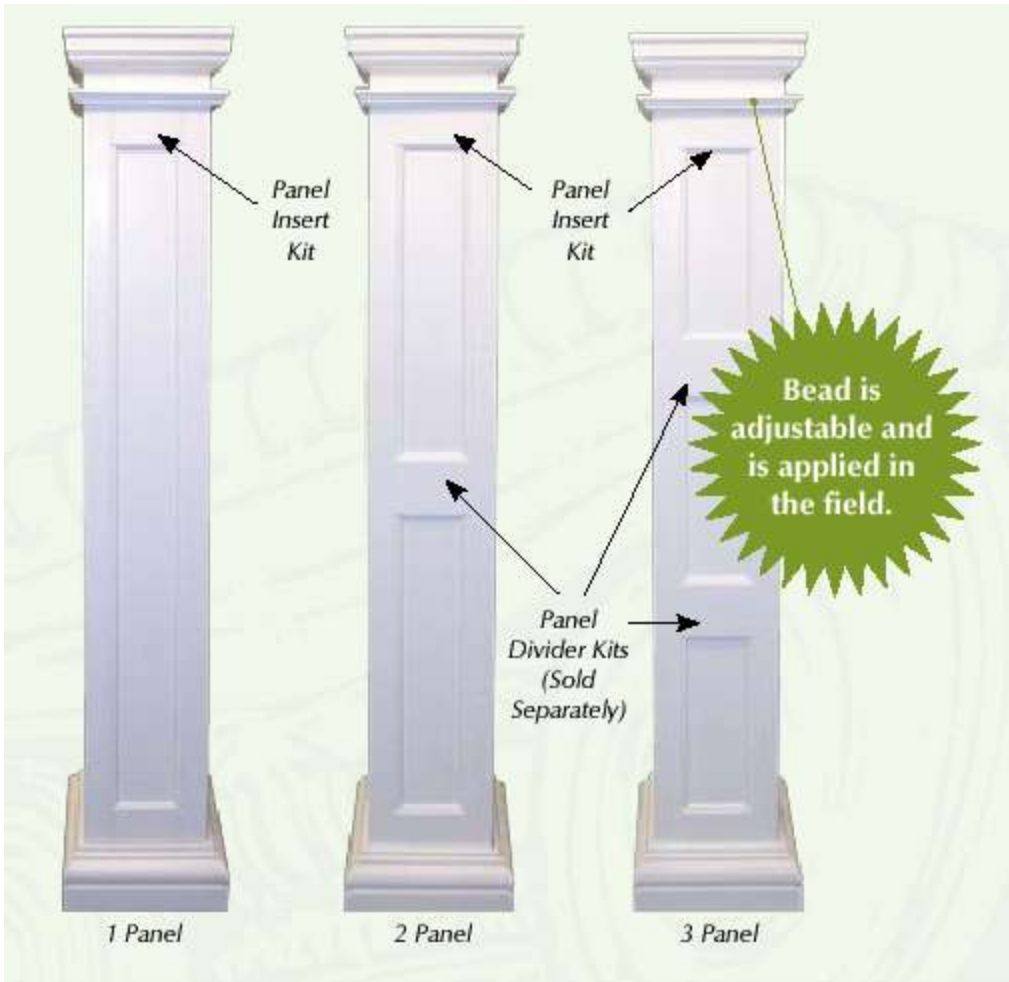
- Add elegance to the front of your home and create that Victorian look with our Victorian style square column
- Columns come standard with a 42" skirt base and a 16" skirt top, all of which are made from a high quality PVC sheeting.
- Constructed of re-enforced fiberglass polymer, columns are load bearing on their own and are capable of carrying up to 10,000 lbs.
- Columns are virtually maintenance free and are impervious to our harsh elements.
- Columns are light weight, easy to install and are paintable.
- We are so confident in our product that we back it with a 15 year limited warranty.



COL SIZE	SHAFT SIZE	A	B	C
6"	5 1/2"	6 3/4"	16"	42"
8"	7 1/4"	8 1/2"	16"	42"
10"	9 3/8"	10 3/4"	16"	42"

column size	maximum load bearing	inside diameter
6	8,000 lbs	5"
8"	10,000 lbs	6 3/4"
10"	12,000 lbs	8 3/4"

RECESSED SQUARE FIBERGLASS COLUMN:



- A Recessed paneled column will surely add elegance to any household.
- Columns are easy to install and come with separate filler pieces that allow you to achieve any height.
- Achieve a single panel or multiple panel affect with our system.
- Constructed of re-enforced fiberglass polymer, columns are load bearing on their own and are capable of carrying up to 10,000 lbs.
- Columns are virtually maintenance free and are impervious to our harsh elements.
- Columns are light weight, easy to install and are paintable.
- We are so confident in our product that we back it with a 15 year limited warranty.

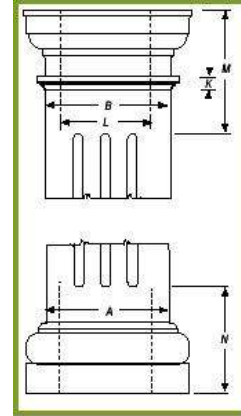
Column Size	Bottom Shaft Width	Neck Shaft Width	Bead (Applied)	Panel Width	Top Insert	Bottom Insert	Load-Bearing Capacity* (in lbs.)	Minimum Wall Thickness	Length (in feet)
	A	B	K	L	M	N			
8"	7½	7½	1	47/8	8	8	6,500	1/8	6, 8, 9, 10, 12
10"	9½	9½	1	55/16	9	9	7,000	1/8	6, 8, 9, 10, 12



FLUTED SQUARE FIBERGLASS COLUMN:

Column Size	Bottom Shaft Width	Neck Shaft Width	Bead Applied	Total Flute Width**	Top Flute Insert	Bottom Flute Insert	Total No. Flutes	No. Flutes per Face	Load-Bearing Capacity* (in lbs.)	Minimum Wall Thickness	Length (in feet)
	A	B	K	L	M	N	O	P	Q	R	S
8"	7 1/2"	7 1/2"	1"	5 1/2"	8"	8"	28	7	6,500	3/8"	8, 8.5, 10, 12
10"	9 1/2"	9 1/2"	1"	7 1/2"	9"	9"	28	7	7,000	3/8"	8, 8.5, 10, 12

- To some perhaps a Fluted column will give your project that look you were looking to achieve.
- Columns are easy to install and come with separate filler pieces that allow you to achieve any height.
- Constructed of re-enforced fiberglass polymer, columns are load bearing on their own and are capable of carrying up to 10,000 lbs.
- Columns are virtually maintenance free and are impervious to our harsh elements.
- Columns are light weight, easy to install and are paintable.
- We are so confident in our product that we back it with a 15 year limited warranty.



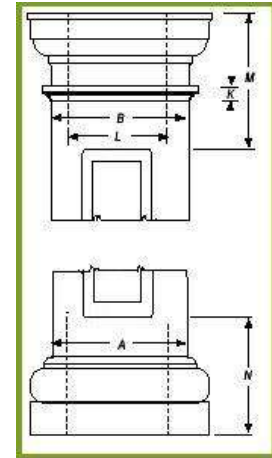
NEW



RAISED PANEL SQUARE FIBERGLASS COLUMN:

Column Size	Bottom Shaft Width	Neck Shaft Width	Bead Applied	Total Flute Width**	Top Flute Insert	Bottom Flute Insert	Total No. Flutes	No. Flutes per Face	Load-Bearing Capacity* (in lbs.)	Minimum Wall Thickness	Length (in feet)
	A	B	K	L	M	N	O	P	Q	R	S
8"	7 1/2"	7 1/2"	1"	5 1/2"	8"	8"	28	7	6,500	3/8"	8, 8.5, 10, 12
10"	9 1/2"	9 1/2"	1"	7 1/2"	9"	9"	28	7	7,000	3/8"	8, 8.5, 10, 12

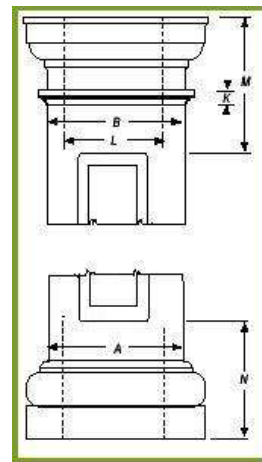
- For others perhaps a raised panel column will give your project that look you were looking to achieve.
- Columns are easy to install and come with separate filler pieces that allow you to achieve any height.
- Constructed of re-enforced fiberglass polymer, columns are load bearing on their own and are capable of carrying up to 10,000 lbs.
- Columns are virtually maintenance free and are impervious to our harsh elements.
- Columns are light weight, easy to install and are paintable.
- We are so confident in our product that we back it with a 15 year limited warranty.



TRIM PANEL SQUARE FIBERGLASS COLUMN:

Column Size	Bottom Shaft Width	Neck Shaft Width	Bead Applied	Total Flute Width**	Top Flute Insert	Bottom Flute Insert	Total No. Flutes	No. Flutes per Face	Load-Bearing Capacity* (in lbs.)	Minimum Wall Thickness	Length (in feet)
	A	B	K	L	M	N	O	P	Q	R	S
8"	7 1/2"	7 1/2"	1"	5 1/2"	8"	8"	28	7	6,500	3/8"	8, 8.5, 10, 12
10"	9 1/2"	9 1/2"	1"	7 1/2"	9"	9"	28	7	7,000	3/8"	8, 8.5, 10, 12

- And for others perhaps a trimmed panel column will give your project that look you were looking to achieve.
- Columns are easy to install and come with a separate pvc molding and are screwed or pin nailed in to achieve a raised trim panel look.
- Constructed of re-enforced fiberglass polymer, columns are load bearing on their own and are capable of carrying up to 10,000 lbs.
- Columns are virtually maintenance free and are impervious to our harsh elements.
- Columns are light weight, easy to install and are paintable.
- We are so confident in our product that we back it with a 15 year limited warranty.



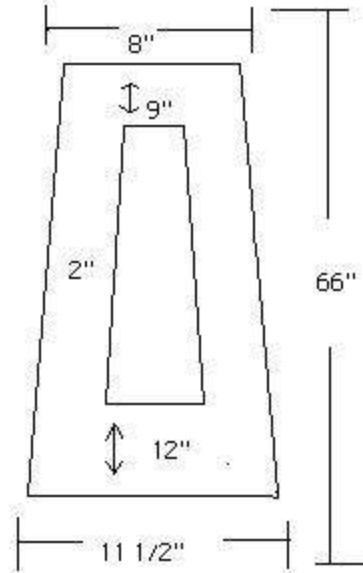
PVC trim piece: 3/4"x1"

NEW

ASPEN TAPERED SQUARE FIBERGLASS COLUMN:



- Roman Columns is proud to introduce it's very own craftsman square tapered column.
- Light weight and easy to install and load bearing on its own....giving you that hand crafted look with no effort at all.
- Constructed of re-enforced fiberglass polymer, columns are load bearing on their own and are capable of carrying up to 4,000 lbs.
- Columns are virtually maintenance free and are impervious to our harsh elements.
- Columns are light weight, easy to install and are paintable.
- We are so confident in our product that we back it with a 15 year limited warranty.



D



COL SIZE	A	B	C	D	E	F	G
12X8X5.5'	1 1/4"	1 1/4"	13 1/2"	10"	8"	11 1/2"	66"



C

ASPEN TAPERED SQUARE PVC WRAP:



- When an Aspen Tapered square fiberglass column won't do the trick a pvc wrap post is another great alternative.
- Because each column is crafted to it's own unique style and size any size is capable of being produced.
- Columns are made from cellular pvc and do require a load bearing plug.
- Check your dealer for sizes and pricing.
- Columns are virtually maintenance free and are impervious to our harsh elements.
- We are so confident in our product that we back it with a 4 year limited warranty.

NON-TAPERED ROUND:

- Round non-tapered columns comes standard 6", 8" and 10" up to 24' in length
- Columns come standard with a Tuscan style cap and base, all of which are made from a high quality rigid polyurethane foam. Caps and bases are also pre-primed.
- Constructed of reinforced fiberglass polymer, columns are load bearing on their own and are capable of carrying up to 10,000 lbs.
- Columns are virtually maintenance free and are impervious to our harsh elements.
- Columns are light weight, easy to install and are paintable.
- We are so confident in our product that we back it with a 15 year limited warranty.



SIZE	LENGHT	PRICE
6"	5'	
8"		
10"		
6"	6'	
8"		
10"		
6"	8'	
8"		
10"		
6"	9'	
8"		
10"		
6"	10'	
8"		
10"		
6"	12'	
8"		
10"		
6"	14'	
8"		
10"		
6"	16'	
8"		
10"		
6"	18'	
8"		
10"		



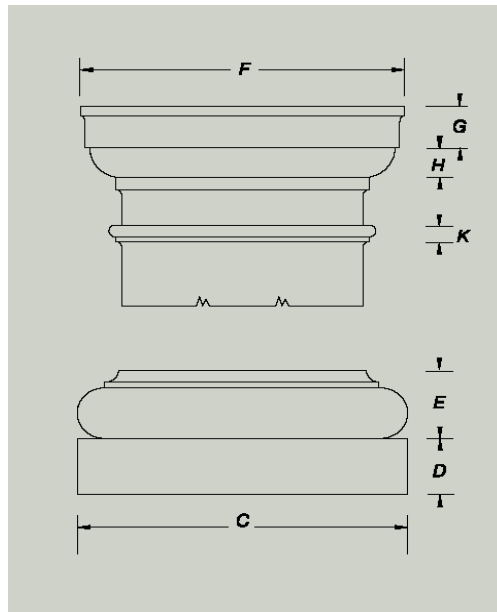
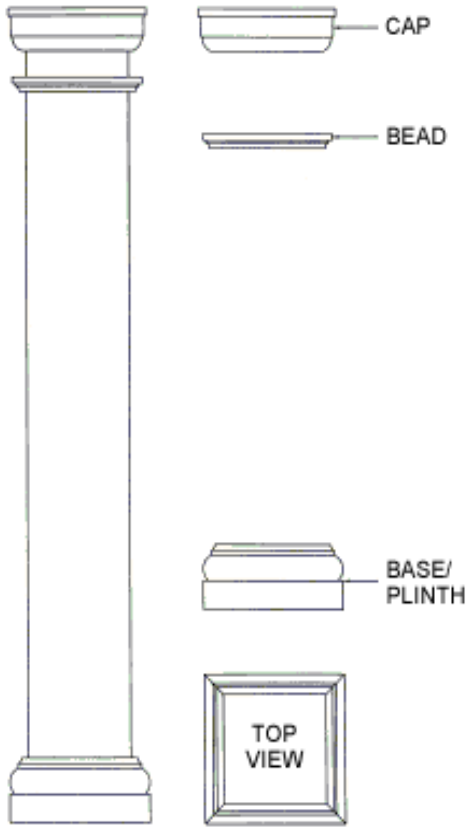
Standard Tuscan cap



Standard Tuscan base



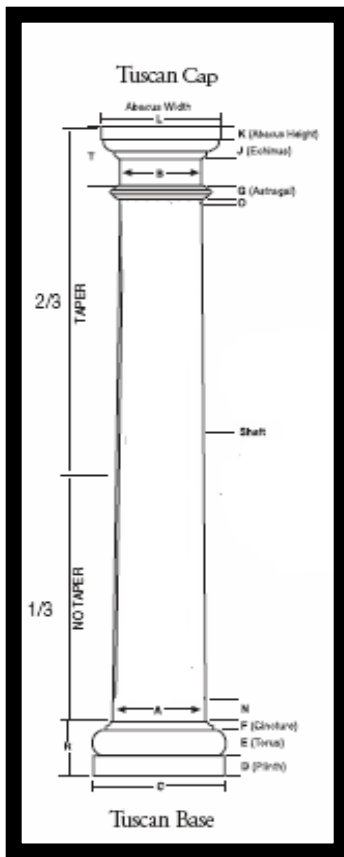
**NON TAPERED
ROUND FIBERGLASS COLUMN:**



COL SIZE	SHAFT SIZE	C	D	E	F	G	H	K
6"	6"	8 1/2"	1 1/2"	1 3/4"	8 1/2"	1 1/2"	1 1/2"	1 1/2"
8"	8"	10 1/2"	2"	2 1/2"	10 3/4"	1 1/2"	1 3/4"	1 1/2"
10"	9 3/8"	12 1/2"	2 1/8"	2 3/4"	12"	1 1/2"	1 7/8"	1 3/4"

column size	maximum load bearing	inside diameter
6"	5,000 lbs	5 3/4"
8"	10,000 lbs	7 3/4"
10"	12,000 lbs	9"

Round PERMACast® Columns



ROUND PERMACAST® COLUMN DIMENSIONS (IN INCHES)*

COL. SIZE	A	B	C	D	E	F	G	I	K	L	O	N	R	T	LENGTH (ft/in)
6"	5 1/2"	4 1/2"	9"	1 1/2"	1 1/2"	7/8"	3/4"	1 1/2"	1 1/2"	8"	NA	NA	3 5/8"	4 1/4"	6,8
8"	7 1/2"	6 1/2"	10 1/2"	1 5/8"	1 5/8"	7/8"	3/4"	1 1/2"	1 1/2"	9 1/4"	1/2"	2 1/2"	4 1/2"	4 1/2"	8,10,16
10"	9 1/2"	8 1/2"	13 1/2"	2 1/8"	2 1/8"	7/8"	3/4"	1 1/2"	1 1/2"	11 1/4"	3/4"	2 1/2"	5 1/2"	5 1/2"	8,10,12
12"	11 1/2"	9 1/2"	16 1/2"	2 1/2"	2 1/2"	7/8"	3/4"	1 1/2"	1 1/2"	13 1/4"	3/4"	2 1/2"	6 1/2"	5 1/2"	8,9,9,10,12,14,16,18
14"	13 1/2"	11 1/2"	19 1/2"	3 1/8"	3 1/8"	1 1/8"	3/4"	2"	2 1/2"	17"	5/8"	2 1/2"	7 1/2"	7 1/2"	8,9,10,12,14,16,18
16"	15 1/2"	13 1/2"	22 1/2"	4"	3 1/2"	1 1/8"	1"	2 1/2"	3"	19 1/2"	1"	3"	8 1/2"	8 1/2"	8,10,12,14,16,18,20
18"	17 1/2"	15 1/2"	24 1/2"	4 1/4"	4 1/4"	1 1/8"	1 1/8"	2 1/2"	3 1/2"	22 1/4"	NA	NA	9 1/2"	8 1/2"	10,12,14,16,18,20,22,26,28
20"	19 1/2"	17 1/2"	27"	4 1/2"	4 1/2"	2"	1 1/8"	2 1/2"	3 1/2"	24 1/4"	NA	NA	11 1/2"	9 1/2"	10,20,22,24
22"	21 1/2"	19 1/2"	30 1/2"	5 1/8"	4 1/4"	2"	1 1/8"	3"	3 1/2"	27 1/4"	NA	NA	12 1/2"	10 1/2"	16,18,20,22,24,26
24"	23 1/2"	21 1/2"	33 1/2"	5 1/2"	5 1/2"	2 1/8"	2 1/8"	3 1/2"	4 1/2"	30 1/4"	NA	NA	13 1/2"	11 1/2"	14,16,18,20,22,24,26,28,30
30"	29 1/2"	26 1/2"	41 1/2"	6 1/2"	5 1/2"	2 1/2"	3 1/8"	4"	4 1/2"	38 1/4"	NA	NA	14 1/2"	14 1/4"	20,22,24,26,28,30

*There may be a variance of up to 1/4" in all dimensions. Fluted columns available in 8", 10", 12", 14" and 16" diameters only (Call for lengths and availability). Plain ROUND PERMACast® columns can be trimmed at least 24" with the following exceptions 6x6-8", 14x9-12", 16x8-16", 18x10-6" Custom sizes available, contact the HB&G architectural department.



ROUND & SQUARE PERMACAST® LOAD BEARING SPECIFICATIONS

Split columns are not load bearing

COLUMN DIAMETER	STRUCTURAL LOAD
6"	8,000 lbs. Max.
8"	10,000 lbs. Max.
10"	14,000 lbs. Max.
12"	18,000 lbs. Max.
14"	20,000 lbs. Max.
16"	20,000 lbs. Max.
18"	20,000 lbs. Max.
20"	20,000 lbs. Max.
22"	20,000 lbs. Max.
24"	20,000 lbs. Max.
30"	20,000 lbs. Max.

ROUND PERMACAST® INSIDE DIMENSIONS

Inside diameter may vary up to 1/8".

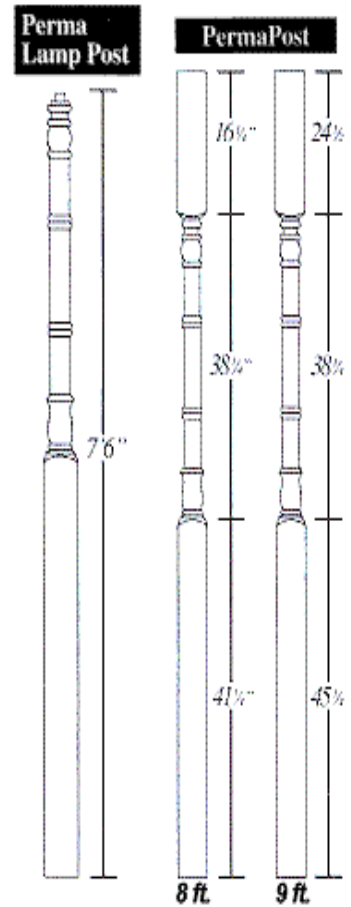
Splitting a column will decrease inside dimension 1/8".

COLUMN SIZE	TOP I.D.	BOT I.D.
6"	3 1/2"	4"
8"	5 1/2"	6 1/2"
10"	7 1/2"	8 1/2"
12"	9 1/2"	10 1/2"
14"	11 1/2"	12 1/2"
16"	13 1/2"	15"
18"	14 1/2"	16 1/2"
20"	16 1/2"	19"
22"	18 1/2"	20 1/2"
24"	20 1/2"	22 1/2"
30"	25 1/2"	28 1/2"



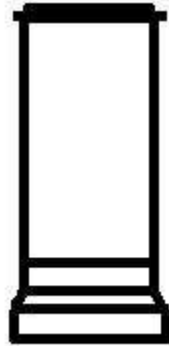
PERMA PORCH POSTS:

- PermaPosts are weatherproof, insectproof and low maintenance.
- PermaPosts are shipped white, ready to install and can be painted with latex or oil-based paints.
- PermaPosts have a 20 gauge (.035) galvanized steel tube inside with a load bearing capacity of 1300 lbs*. The steel tube is held in place by polyurethane foam.
- Available in 5"x8', 5"x9', 6"x8', 6"x9' size porch posts and 5"x7'6" lamp post. PermaPost is shrink-wrapped with color label and includes two PermaPost fasteners. Porch posts are foam filled. When ordering simply use the appropriate stock number as shown above in parenthesis. PermaPost Fasteners Two (2) PermaPost Fasteners are shipped with each post. Simply screw or nail into place and rest the PermaPost on top. PermaPost pipe should be trimmed to the same length as post. Sizes 5" x 5" #17050, 6" x 6" #17051

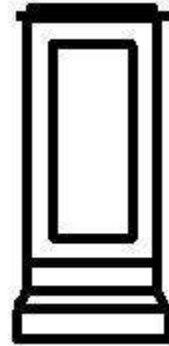


SIZE	LENGHT	PRICE
5 1/4"	8'	
5 1/4"	9'	

PILLAR BOXES:



W/O DESIGN



W/DESIGN

10"X10"X48"
12"X12"X48"
14"X14"X48"

***COLUMNS ARE MADE FROM EITHER PVC OR FIBERGLASS.

***COLUMNS ARE MADE LOAD BEARING WITH AN INTERIOR PLUG.

***PAINTABLE AND MAINTENANCE FREE

***COLUMNS COME STANDARD WITH A COLONIAL CAP AND BASE SET.

***PANEL MOULD IS OPTIONAL.

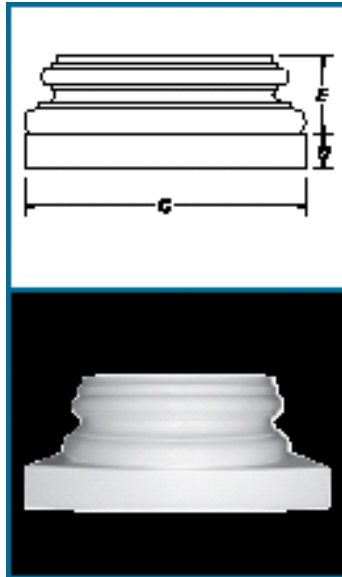
***OTHER SIZES ARE AVAILABLE UPON REQUEST.

***BOXES TO FIT WITH ANY SQUARE OR ROUND COLUMN JUST SPECIFY.



ORNAMENTAL CAPITALS AND BASES:

- Add distinction to your existing product idea, Roman Columns also offers a wide range and selection of ornamental bases and capitals.
- Not happy with the norm, choice from our large selection
- Constructed of reinforced fiberglass polymer, or rigid poly urethane foam bases are pre-primed.
- Caps and bases are virtually maintenance free and are impervious to our harsh elements.
- Caps and bases are light weight, easy to install and are paintable.
- We are so confident in our product that we back it with a 15 year limited warranty.



Column Size	Plinth		Base Mold
	Width	Height	
	C	D	E
6" *	7 ¹ / ₄	1 ³ / ₈	1 ¹ / ₂
8" **	9 ³ / ₄	1 ¹ / ₄	1 ¹ / ₂
10" **	11 ³ / ₄	1 ³ / ₈	1 ¹ / ₂
12" *	13 ¹ / ₈	1 ¹ / ₂	1 ¹ / ₂

Attic Base



Scamozzi

Column Size	Dimensions*		
	Diameter	Height	Abacus
6"	5 ¹ / ₄	2 ⁷ / ₈	8 ¹ / ₂
8"	7 ¹ / ₄	3 ¹ / ₈	13 ¹ / ₂
10"	9	4 ¹ / ₈	14 ¹ / ₂
12"	11	5 ¹ / ₈	16 ¹ / ₂
14"	12	5 ⁵ / ₈	18 ¹ / ₄
16"	14	7 ¹ / ₂	22
18"	16	7 ¹ / ₂	24 ¹ / ₄
20"	17 ¹ / ₄	8 ¹ / ₂	28 ¹ / ₂
22"	20	9 ¹ / ₈	30 ¹ / ₂
24"	22	10 ³ / ₄	32 ¹ / ₄
28"	25	12 ¹ / ₄	38 ¹ / ₂
30"	26	15 ¹ / ₄	46 ¹ / ₄



Roman Ionic

Column Size	Dimensions*		
	Diameter	Height	Abacus
6"	6 ¹ / ₄	2 ⁵ / ₈	7 ¹ / ₂
8"	7 ¹ / ₂	3 ¹ / ₂	9 ¹ / ₂
10"	9	4 ¹ / ₄	11 ¹ / ₂
12"	10 ³ / ₈	4 ¹ / ₂	12 ¹ / ₄
14"	12	5	16 ¹ / ₂
16"	14	6 ³ / ₈	17 ¹ / ₄
18"	16	6 ¹ / ₂	21 ¹ / ₄
20"	18 ¹ / ₂	9	25
22"	20 ¹ / ₂	9 ¹ / ₂	25 ¹ / ₈
24"	20 ¹ / ₂	9 ¹ / ₂	25 ¹ / ₈



Temple of Winds

Column Size	Dimensions*		
	Diameter	Height	Abacus
6"	5 ¹ / ₄	7	8 ¹ / ₄
8"	6 ¹ / ₂	7 ¹ / ₄	10 ¹ / ₂
10"	9	11 ¹ / ₄	15 ¹ / ₄
12"	10 ¹ / ₄	11 ¹ / ₂	17
14"	11 ¹ / ₂	14	21 ¹ / ₂
16"	14	17	23 ¹ / ₄
18"	15	18 ³ / ₄	27
20"	18	21 ¹ / ₂	27 ¹ / ₄
22"	19 ¹ / ₄	24 ¹ / ₈	35
24"	19 ¹ / ₂	23	35 ³ / ₄
28"	24	26 ¹ / ₈	37 ¹ / ₄



Roman Corinthian

Column Size	Dimensions*		
	Diameter	Height	Abacus
6"	5 ¹ / ₄	7 ¹ / ₄	10
8"	7	8 ¹ / ₄	12 ¹ / ₄
10"	8 ¹ / ₂	11 ¹ / ₈	15
12"	9 ¹ / ₈	14	19 ¹ / ₈
14"	11	15 ¹ / ₈	19 ¹ / ₈
16"	12 ⁷ / ₈	17 ¹ / ₈	22 ¹ / ₂
18"	15	17 ¹ / ₄	25 ¹ / ₄
20"	17 ¹ / ₄	25 ¹ / ₄	39
22"	18 ¹ / ₂	28 ¹ / ₂	41
24"	20	28 ¹ / ₂	42
28"	25	34	46
30"	26	36	48

ALUMINUM COLUMNS:



Roman extruded aluminum [round](#) and [square fluted](#) or [square smooth columns](#) recreate traditional elegance at very affordable prices. Fashioned from sturdy long-lasting aluminum, these smartly [styled columns](#) are perfect for either remodeling or new construction.

Our aluminum columns are versatile, too. They can be used to create a classical mood on homes, churches, office buildings, schools, libraries, motels, museums and other public buildings. Residential or commercial, indoors or out, beautiful aluminum columns are the low-cost way to add a touch of class to your architectural designs.

Superior Aluminum Columns provide the elegance you want in a low- maintenance column. With several styles available in a variety of [pre-painted colors](#), they complement any structure and offer several advantages compared to wood or other alternative materials.



NEW

WE'RE GOING COLOUR!!

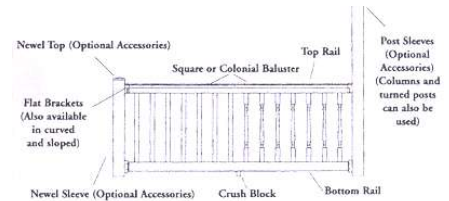


		
Clay	Tan	White

RAILINGS AND BALASTRADE:

TRI-LAYERED PVC DURAL RAIL:

- The Dura Rail System has a unique Tri-layered Composite formula that offers top quality. It provides thicker walls, greater stiffness, and rigidity with less weight. It is ideal for harsh outdoor weather conditions and is virtually maintenance-free. The Dura Rail system is easy to install, UV protected and comes in a vibrant white that never needs to be painted.
- Stair Rail Kit
- For stair and step applications, purchase 6' Dura Rail Stair Rail Kits. Each kit includes every component needed for installation, including a sloped bracket set to accommodate the angular application. For commercial use or where applicable, it may be necessary to install a handrail that meets specific code requirements. Check with local code officials for the requirement in your area.
- The DURA Rail System
- Fastest and easiest installation (approx. 7 minutes for a standard 8' rail section)
- Prepackaged kits make job site application simple
- Easy pre-mortised rail to baluster fit
- The only code certified vinyl rail system on the market (SBCCI 9850A)
- Stair Applications - Sloped Brackets are only available in the Dura Rail System
- Lifetime warranty assures quality
- Never Needs Painting
- More options in any other system on the market to fit all applications



IMPERIAL KOOL RAY ALUMINUM RAIL:

CONTRACTOR
5000
SERIES

Contemporary Design at an Affordable Price

MEETS BUILDING CODES

FEATURES & BENEFITS

- Aluminum construction
- Maintenance free
- No painting or staining
- Stronger than PVC or wood
- Corrosion resistant
- Will not warp, crack or fade with time
- Flexibility in lengths and styles
- Multiple applications such as decks, pools, spas, porches or balconies
- 20-year limited warranty (perforated components must be used for warranty to apply)
- Available within 10 working days

HEIGHT | 32" | 36" | 42" |

SPINDLE SIZE | 1/2" x 3/4" | 3/4" x 3/4" | 3/4" x 1" |

SPINDLE DESIGN

| Straight (A) | New-Curve (B) |

| Excel (C) | Round (D) |

† New-Curve spindles (B) are not available for 42" high railing.

VISION GLASS | Clear | Smoke |

POSTS | 2" x 2" | 3" x 3" |

In applications where the railing will be mounted on AECI pressure treated wood, a wood gasket must be used to prevent contact between aluminum posts and the wood.

COLORS | White | Bronze | Clear | Black

*Availability of some colors by railing system. Not all decks.

BALASTRADE:



Balustrade Features:

- 6", 7" and 12" Styles Available
- Manufactured from High-Density Polyurethane
- Low Maintenance
- Durable
- Decay Resistant
- Primed White (Ready to Paint)
- Easy to Install
- Curved "Radius" Rail Styles Available
- 25 Year Limited Warranty



WOOD COLUMNS:



* We have invested in the finest milling equipment and it would be simply wasteful to use lesser quality materials. We use only the highest grade of finger-joint EASTERN WHITE PINE. We also have available an array of stain-grade materials.

* Our stock house columns include sizes of 6", 8" and 10" up to 12' long which are non-tapered. Shafts of bigger and longer dimensions and also columns that taper to architectural proportions are special order.

* Our columns are made up of only the highest grade of type-1 water proof glue. During the clamping process each clamp is hand torqued and left in place for a full 16 hours.

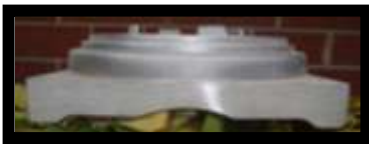
* Each of our products is hand sanded and thoroughly inspected to ensure that each column surpasses your expectations and giving you that hand crafted look.

* Our columns are made from tongue and groove staves to ensure a stronger and more proper fit.

* We are always adaptable to your specifications and are capable of producing most anything. We are truly unique in design.

COLONIAL ROUND:

SIZE	LENGTH	PRICE
6"	5'	
8"		
10"		
6"	6'	
8"		
10"		
6"	8'	
8"		
10"		
6"	9'	
8"		
10"		
6"	10'	
8"		
10"		
6"	12'	
8"		
10"		



OPTIONAL ALUMINUM BASE



EACH OF OUR COLUMNS ARE MANUFACTURED FROM ONLY THE HIGHEST GRADE OF FINGER-JOINT EASTERN WHITE PINE. IN THE FINGER-JOINTING PROCESS EACH PIECE IS GLUED USING ONLY TYPE 1 WATERPROOF GLUE.

EACH OF OUR STAVES ARE MADE FROM 5/4X4" FINGER-JOINT PINE. A TONGUE AND A GROVE IS MOULDED INTO EACH STAVE AND ANGLED TO PRECISSION, THIS WILL NOT ONLY ENSURE A PROPER FIT BUT ALSO GIVES THE ENTIRE COLUMN A GREATER STRUCTURAL INTEGRITY. THE WALL THICKNESS OF EACH FINISHED COLUMN IS APPROXIAMATELY 1 1/4". DURING OUR GLUING PROCESS EACH STAVE IS GLUED TOGETHER, AGAIN, USING TYPE 1 WATERPROOF GLUE AND THEN STRAPPED TOGETHER USING SPECIAL CLAMPS AND LEFT IN PLACE FOR A FULL 16 HOURS. BELOW YOU WILL FIND A LOAD BEARING SPEC THAT CAN BE USED AS A GUIDE. EACH OF THESE SPECS ARE DEPENDANT ON CONCENTRIC LOADING.

SIZE	STAVE THICKNESS	SAFE LOAD
6"	1 1/4"	3000 LBS
8"	1 1/4"	4200 LBS
10"	1 1/4"	5400 LBS

COLONIAL SQUARE:

SIZE	LENGHT	PRICE
6" 8" 10"	6'	
6" 8" 10"	8'	
6" 8" 10"	9'	
6" 8" 10"	10'	
6" 8" 10"	12'	



- EACH OF OUR COLUMNS ARE MANUFACTURED FROM ONLY THE HIGHEST GRADE OF FINGER-JOINT EASTERN WHITE PINE. IN THE FINGER-JOINTING PROCESS EACH PIECE IS GLUED USING ONLY TYPE 1 WATERPROOF GLUE.
- EACH COLUMN IS SANDED TO A FINISHING 180 GRIT PAPER AND THEN EACH CORNER IS MACHINED TO GIVE YOU THAT CLASSICAL ELEGANT LOOK.
- EACH OF OUR STAVES ARE MADE FROM 5/4X6,8 OR 10" FINGER-JOINT PINE., THE WALL THICKNESS OF EACH FINISHED COLUMN IS APPROXIAMATELY 1 3/8". 8"
- DURING OUR GLUING PROCESS EACH STAVE IS GLUED TOGETHER, AGAIN, USING TYPE 1 WATERPROOF GLUE AND THEN STRAPPED TOGETHER USING SPECIAL CLAMPS AND LEFT IN PLACE FOR A FULL 16 HOURS. BELOW YOU WILL FIND A LOAD BEARING SPEC THAT CAN BE USED AS A GUIDE. EACH OF THESE SPECS ARE DEPENDANT ON CONCENTRIC LOADING.



OPTIONAL ALUMINUM BASE

SIZE	STAVE THICKNESS	SAFE LOAD
6"	1 1/4"	3000 LBS
8"	1 1/4"	4200 LBS
10"	1 1/4"	5400 LBS

STAIN GRADE COLUMNS:

NEW



Red Oak



Cherry



Hard Maple



African Mahogany

SIZE	LENGHT	PRICE
6"	5'	
8"		
10"		
6"	6'	
8"		
10"		
6"	8'	
8"		
10"		
6"	9'	
8"		
10"		
6"	10'	
8"		
10"		



Our new stain Grade special order Wood Columns are available in four different wood species: Red Oak, Hard Maple, Mahogany, or Cherry. The shafts are manufactured either plain or fluted and are made for interior use only. The stain grade stock wood columns have a straight taper and colonial style bead. All Stain Grade Stock Wood Columns come standard with a modified Tuscan design cap and base/plinth set and must be purchased separately.

INTERIOR MDF PAINTGRADE RASISED PANEL COLUMNS:



SIZE	LENGHT	PRICE
6"	5'	
8"		
10"		
6"	6'	
8"		
10"		
6"	8'	
8"		
10"		
6"	9'	
8"		
10"		
6"	10'	
8"		
10"		

INTERIOR MDF PAINTGRADE FLUTED PANEL COLUMNS:



SIZE	LENGHT	PRICE
6"	5'	
8"		
10"		
6"	6'	
8"		
10"		
6"	8'	
8"		
10"		
6"	9'	
8"		
10"		
6"	10'	
8"		
10"		

MOULDINGS AND BRACKETS:



With over 200 pages of assorted mouldings and brackets to choose from we take great pride in distributing one of North America's largest polyurethane manufacturers. Check out their website at www.spectis.com for more details.

WOOD COLUMN INSTALLATION AND PAINTING PROCEDURES: INSTALLATION:

- 1) MEASURE THE OVERALL HEIGHT WITH EXTERIOR COLUMNS
- RAISE THE SOFFIT OR PORCH SLIGHTLY WITH A BRACE FOR EASY INSTALLATION OF THE COLUMN.
- 2) TRIM THE COLUMN SHAFT ON THE BOTTOM END ONLY. TRIM WITH AN FINE SAW BLADE. FINISH BOTH TOP AND BOTTOM WITH A RASP OR SANDER TO ENSURE AN EVEN LOAD DISTRIBUTION AROUND THE ENTIRE CIRCUMFERENCE. ALSO, WHEN TRIMMING COLUMN SHAFT REMEMBER TO KEEP IN MIND CAP AND BASE.
- 3) INSTALL BOTH CAP AND BASE WITH PROPER NAILS OR SCREWS.
- 4) SLIDE COLUMN INTO PLACE AND REMOVE BRACE.
- 5) FASTEN THE COLUMN FOR UPRIGHT PURPOSES BY SCREWING OR NAILING THE CORNERS OF THE CAP AND BASE INTO THE CEILING AND FLOOR.
- 6) CHECK THE CAP AND BASE WHERE NECESSARY FOR A FINISHED APPEARANCE.
- **PAINTING:**
- 1) STORAGE OF COLUMNS MUST BE IN A COOL DRY AND VENTILATED AREA.
- 2) BEFORE INSTALLATION PAINT SHAFTS, CAPS & BASES WITH ONE COAT OF A TOP QUALITY ALKYD OR OIL-BASED PRIMER, FOLLOWED BY TWO COATS OF TOP QUALITY ALKYD OR OIL-BASED PAINT. COLUMNS MAY NEED SOME FINISH WORK PRIOR TO THE APPLICATION OF PAINT.
- 3) EACH CAP AND BASE MUST BE PRIMED AND PAINTED ON ALL SIDES WITH THE SAME QUALITY OF PAINT.
- 4) THE SAME AMOUNT OF PRIMER AND PAINTING SHOULD BE APPLIED TO THE TOP AND BOTTOM OF THE SHAFT, AND AT LEAST ONE AND HALF FEET UP THE INSIDE OF THE SHAFT AT THE BOTTOM.
- BY DOING THE AFOREMENTIONED YOUR PROJECT WILL LAST FOR YEARS TO COME.
- warrants stock wood columns to be free from manufacturing defects for one year. If defects are present then warranty is limited to Replacing or repairing the defective parts. Provided the column has been properly installed. All replace or repair, at its option, any column that has failed as a result of defective material or workmanship. The warranty does not cover labour or any failure resulting from abuse. See to the after purchase. Payment for installation or painting is not covered by our warranty. This warranty applies to the original owner of the structure to which the column(s) are attached and terminates upon the sale of the structure.



LIMITED 15 YEAR WARRANTY: NON-TAPERED FIBERGLASS COLUMNS

- 1) LIMITED 15 YEAR WARRANTY
- a) Subject to the limitations and exclusions below, warrants to the owner of the structure to which the products are attached at the time the products are attached that Products will be free from defects in material and workmanship for a 15 year time period. Seller's sole obligation under this warranty is limited to repairing or replacing, at its option, the defective Products.
- b) The provisions of this limited warranty do not apply to products: (i) used for the purposes for which they are not designed or intended; (ii) which have been repaired or altered without Seller's prior written consent; (iii) which have been subject to misuse, abuse, negligence, or accident; (iv) which have been improperly stored, installed, maintained, or operated; (v) which have been used in violation of written instructions provided by Seller to Buyer; (vi) which have been subjected to improper temperature, humidity, or other environmental conditions; (vii) which have been effected by normal wear and tear; (viii) which have been split or modified or are load bearing; or, (ix) which based on Seller's examination, do not disclose to Seller's satisfaction nonconformance to the warranty.
- c) The following cost and expenses are not covered by the provisions of this limited warranty: (i) labour costs of the removal and reinstallation of Products; (ii) shipping and freight expenses required to return Products to Seller; (iii) normal maintenance; and (iv) economic losses.
- d) This warranty is exclusive and limited to the owner of the structure to which the products are attached at the time the products are attached, and terminates upon the sale of the or transfer of the structure.
- e) The provisions of this limited warranty are not applicable to anything other than defects in seller's material or workmanship.
- 2) Disclaimers of warranties. No other warranties, express or implied, are made with respect to the products including, but not limited to, any implied warranty of merchant ability or fitness for a particular purpose. Seller does not authorize any person to create for it any obligation or liability in connection with products.
- 3) Buyer's Remedies. The buyer's exclusive and sole remedy on account of, or in respect of, the furnishing of products that do not conform to this agreement will be to secure repair or replacement of the products, at seller's option. In no event will the seller's maximum liability exceed the selling price for the products.
- 4) Limitation of liability. In no event will seller be liable for incidental, consequential, indirect, special, or punitive damages including, but not limited to, loss of use of the products, loss of profits, loss of revenue, interest, lost goodwill, work stoppage, impairment of other goods, loss by reason of shutdown, or non-operation, increased expenses of operation, or claims of buyer's customers, whether based on contract, warranty, tort (including, but not limited to, strict liability or negligence), patent infringement, or otherwise, even if advised of the possibility of such damages.
- 5) State of limitations. No action arising out of any claimed breach of this agreement by seller may be brought by buyer more than one (1) year after the cause of action has arisen.

FIBERGLASS COLUMN INSTALLATION AND PAINTING PROCEDURES:

- **INSTALLATION:**
- 1) MEASURE THE OVERALL HEIGHT, RAISE THE SOFFIT OR PORCH SLIGHTLY WITH A BRACE FOR EASY INSTALLATION OF THE COLUMN.
- 2) TRIM THE COLUMN SHAFT. TRIM WITH AN ABRASIVE SAW. FINISH THE TOP AND BOTTOM OF THE SHAFT WITH A RASP OR SANDER TO ENSURE AN EQUAL LOAD DISTRIBUTION AROUND THE ENTIRE CIRCUMFERENCE.
- 3) SLIDE CAP AND BASE ON SHAFT AND THEN POSITION COLUMN
- INTO PLACE IN SUCH A MANNER THAT CONCENTRIC LOADING
- IS ACCOMPLISHED. WE ALSO SUGGEST THAT A PIECE OF PLYWOOD BE
- PLACED ON TOP OF THE COLUMN SHAFT IN ORDER TO ACHIEVE A GREATER CONCENTRIC LOADING OF THE PRODUCT.
- 4) SLIDE CAP UP TO THE SOFFIT AND ATTACH TO SOFFIT USING CORROSION RESISTANT SCREWS. ATTACH TO FLOOR USING APPROPRIATE FASTENERS.
- 5) CAULK BETWEEN THE CAP AND BASE FOR A FINISHED APPEARANCE.
- 6) IN REGARDS TO ANY RAIL GARD SYSTEMS BEING ATTACHED TO THE AFOREMENTIONED PRODUCTS WE SUGGEST THE FOLLOWING
- 7) LINE THE INTERIOR OF THE COLUMN SHAFT WITH A STRIP OF WOOD OR PLYWOOD WHERE THE RAIL GARD IS BEING ATTACHED. WHEN THIS IS NOT POSSIBLE WE SUGGEST USING PL PREMIUM ADHESIVE AS A SUPPLEMENT TO ASSIST IN THE DURABILITY OF THE RAIL GARD. WE ALSO STRONGLY SUGGEST, TO USE COARSE THREADED SCREWS ALONG WITH AT LEAST ONE (1) TOGGLE BOLT PER BRACKET.
- **PAINTING:**
- 1) MAKE SURE ALL SURFACES ARE CLEAN PRIOR TO PAINTING. USE MINERAL SPIRITS IF OIL OR ALKYD PRODUCTS ARE USED. WARM SOAPY WATER SHOULD BE USED IF LATEX PRODUCTS ARE UTILIZED. IT MAY BE NECESSARY TO SAND DECORATIVE CAPITALS PRIOR TO PRIMING AND PAINTING. SOME COSMETIC FILLING MAY BE REQUIRED.
- 2) ALKYD OR OIL BASED PRIMER AND PAINT ARE RECOMMENDED. LATEX PRODUCTS MAY BE USED, BUT ADDITIONAL SANDING MAY BE REQUIRED.
- 3) USE A GOOD HIGH QUALITY EXTERIOR PAINT. AT LEAST ONE COAT OF PRIMER AND TWO COATS OF FINAL PAINT ARE RECOMMENDED.
- 4) FOLLOW PAINT MANUFACTURER'S INSTRUCTIONS CONCERNING USE WITHIN TEMPERATURE RANGES FOR BEST RESULTS.
- 5) DO NOT USE PAINT OR SOLVENTS CONTAINING ACETONE.
- LIMITED 15 year WARRANTY warrants the fiberglass column to be free from defects in material and workmanship. Provided the column has been properly installed. We will replace or repair, at its option, any column that has failed as a result of defective material or workmanship. This warranty does not cover labour or any failures resulting from alterations to the product after purchase. This warranty applies to the original owner of the structure to which they are attached and terminates upon the sale of the structure.



JOINING SPLIT COLUMNS INSTALLATION PROCEDURE

- **WOOD COLUMNS:**
- 1) USING A GOOD QUALITY WOOD GLUE, SPREAD AMPLE GLUE ON BOTH SIDES OF EACH THE HALVES. ALIGN HALVES TO MATCH, THEN NAIL OR SCREW BOTH HALVES TOGETHER.
- 2) ONCE THE GLUE IS DRY USE ANY GOOD QUALITY WOOD FILL
- SEAL ANY CRACKS OR OPENINGS. SAND AND THEN PAINT.
- **FIBERGLASS COLUMNS:**
- 1) USING PL-PREMIUM OR ANY OTHER GOOD QUALITY CHALK ADHESIVE, SPREAD AMPLE CHALK ON BOTH HALVES OF COLUMN. ALIGN HALVES TOGETHER.
- 2) USING STRAPS PROVIDED (PLACE EVERY 16") PULL TIGHT UNTIL HALVES MEET.
- 3) PLACE ALUMINUM PLATES PROVIDED AT THE TOP AND BOTTOM OF THE COLUMN AND SCREW INTO THE COLUMN.
- 4) WRAP COLUMN SHAFT AND BASE WITH SAME ADHESIVE AND THEN NAIL OR SCREW TOGETHER.
- 5) CLEAN OFF ANY EXCESS ADHESIVE ON COLUMN SHAFT AND BASES.
- 6) ONCE ADHESIVE HAS CURED CUT STRAPS OFF REMOVE EXCESS ADHESIVE WITH PUTTY KNIFE. FILL ANY CRACKS OR DEFECT WITH ANY GOOD QUALITY BODY FILLER.
- 7) SAND WHERE NECESSARY AND PREP FOR PAINTING.
- **SPLIT COLUMNS HAVE NO LOAD BEARING CHARACTERISTICS, THEY ARE STRICTLY DECORATIVE.



LIMITED 1 YEAR WARRANTY: WOOD COLUMNS

- 1)LIMITED 1 YEAR WARRANTY
- a)Subject to the limitations and exclusions below, warrants to the owner of the structure to which the products are attached at the time the products are attached that Products will be free from defects in material and workmanship for a 15 year time period. Seller's sole obligation under this warranty is limited to repairing or replacing, at its option, the defective Products.
- b)The provisions of this limited warranty do not apply to products: (i)used for the purposes for which they are not designed or intended;(ii)which have been repaired or altered without Seller's prior written consent; (iii)which have been subject to misuse, abuse, negligence, or accident; (iv) which have been improperly stored , installed, maintained, or operated; (v) which have been used in violation of written instructions provided by Seller to Buyer; (vi) which have been subjected to improper temperature, humidity, or other environmental conditions; (vii) which have been effected by normal wear and tear; (viii) which have been split or modified or are load bearing; or, (ix) which based on Seller's examination, do not disclose to Seller's satisfaction nonconformance to the warranty.
- c)The following cost and expenses are not covered by the provisions of this limited warranty; (i) labour costs of the removal and reinstallation of Products; (ii) shipping and freight expenses required to return Products to Seller; (iii) normal maintenance; and (iv) economic losses.
- d)This warranty is exclusive and limited to the owner of the structure to which the products are attached at the time the products are attached, and terminates upon the sale or the or transfer of the structure.
- e)The provisions of this limited warranty are not applicable to anything other than defects in seller's material or workmanship.
- 2)Disclaimers of warranties. No other warranties , express or implied, are made with respect to the products including, but not limited to, any implied warranty of merchant ability or fitness for a particular purpose. Seller does not authorize any person to create for it any obligation or liability in connection with products.
- 3)Buyer's Remedies. The buyer's exclusive and sole remedy on account of, or in respect of, the furnishing of products that do not conform to this agreement will be to secure repair or replacement of the products, at seller's option. In no event will the seller's maximum liability exceed the selling price for the products.
- 4)Limitation of liability. In no event will seller be liable for incidental, consequential, indirect, special, or punitive damages including, but not limited to, loss of use of the products, loss of profits, loss of revenue, interest, lost goodwill, work stoppage, impairment of other goods , loss by reason of shutdown or non-operation, increased expenses of operation, or claims of buyer's customers, whether based on contract, warranty, tort (including, but not limited to, strict liability or negligence), patent infringement, or otherwise, even if advised of the possibility of such damages.
- 5)State of limitations. No action arising out of any claimed breach of this agreement by seller may be brought by buyer more than one (1) year after the cause of action has arisen.

FLAME SPREAD TEST DURALITE

Bodycote MATERIALS TESTING CANADA INC. www.bodycote.com
 240 SPADINA AVENUE, MISSISSAUGA, ONTARIO L4V 1R3 CANADA TEL: (905) 884-1111 FAX: (905) 882-1448

July 12, 2004

Re: Composites Division U.S. and Canadian Test Results on Duralite

Dear Sir,

This is in response to your request for a comparison regarding the reported test results for a product recently tested in accordance with the American standard method (ASTM E 84) if the same product was subjected to the Canadian standard test protocol (CANULC-3-102).

Before we address the issue, a brief history and description of the test methods is in order. The 25 foot tunnel reference system as the "Bureau Tunnel", was originally developed in the U.S. at Underwriters Laboratories in Chicago. Through the years the test has become widely adopted by the various standards writing bodies in the USA AND Canada.

In the U.S. the test is designated as ASTM E 84 (E, 02) and in Canada as CANULC-3-102. Both refer to a single passant configuration. In Canada an additional fire-coated configuration (CANULC-3-102-2) has been developed for flooring and other configurations that allow one appropriate for ceiling testing.

The two tunnels (E 84 & 3-102) are identical dimensionally and are run under essentially the same operating conditions: furnace at 800 degrees for 15 minutes and a flow of velocity of 200 ft/min. The main structural difference lies in the method of achieving air recirculation (necessary to ensure freedom along the tunnel). In E 84 the recirculation is achieved by placing six baffles alternately along the walls of the tunnel. In E 84 the baffles are replaced by series of tapered vanes. In other words, E 84 has six baffles and two windows, 3-102 has no baffles and tapered windows.

The facility test produces two main parameters: flame spread contribution (FSC) and smoke developed (SD). The FSC is not marked with "FT" (flame spread test) to mean the same as "FTC".

Bodycote Materials Testing Canada Inc.
 ASTM E 84 Surface Burning Characteristics of "Fiberglass" Fiberglass Page 1 of 2
 Report No. 04-02-001

ACCREDITATION: Institute of Canada, Registration No. 100-10000, registered by QML, Registration #011100.

REGISTRATION: ISO 9001:2000, registered by QML, Registration #011100.

SPECIFICATIONS OF ORDER: Determine the Flame Spread and Smoke Developed Indices based upon a single test conducted in accordance with ASTM E 84-03, as per your request of June 30, 2004.

SAMPLE IDENTIFICATION: Material identified as "Fiberglass" Fiberglass
 100°C sample identification number 04-02-00000.

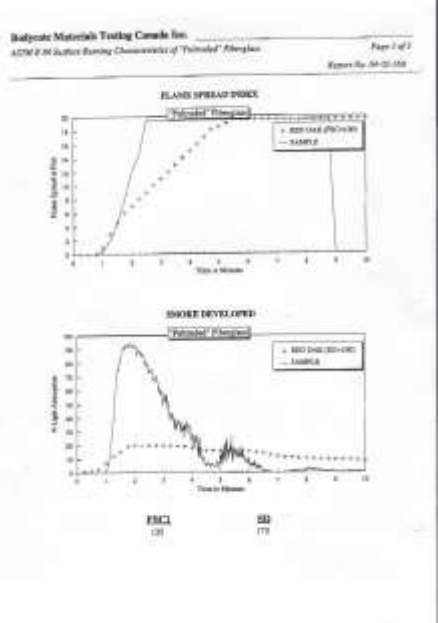
TEST PROCEDURE: The method, designated as ASTM E 84-03, "Standard Method of Test for Surface Burning Characteristics of Building Materials", is designed to determine the relative surface burning characteristics of materials under specific test conditions. Results are expressed in terms of Flame Spread Index (FSI) and Smoke Developed (SD).

Although the procedure is applicable to materials, products and assemblies used in building construction the development of composite or surface spread of flame data, but not strictly one-way surface burning characteristics of solid materials under all building conditions.

SAMPLE PREPARATION: The sample, which consisted of 11 inch and 1 inch wide sections fitted together with a 1" overlap to provide the required 25 inch width by 54 inch specimen size, was conditioned to constant mass in a desiccator of 110°F and a relative humidity of 20% prior to testing. During testing the sample was supported with "M" steel rods placed at two foot intervals.

SUMMARY OF TEST PROCEDURE: The tunnel is preheated to 1075°, as measured by the floor embedded thermocouple located 21.25 ft. downstream of the burner pan, and allowed to cool to 1075°, as measured by the floor embedded thermocouple located 13 ft. from the burner. At this time the report #4 is reset and the test sample is placed along the edges of the tunnel set up in flame continuous setting. 20 ft. long, 12 inches above the floor. The test is then terminated after 10 min.

FLAME SPREAD DURALITE



One of the main differences between the two systems is the method of calculation of FSC (FSI). After 1975, both bodies adopted a new formula for flame spread contribution, although in 1979 the American decided to lower their index by some 1/3. Canada did not follow suit, so comparing apples to apples between Canada FSC is up 3.7% higher than U.S. FSC.

When comparing the results obtained for products tested by both Canada and U.S. tested test procedures, it can be expected that the E 84 and 3-102 would show reasonable agreement except for the 3.7% calculation difference about specimens mounted in identical and the operating conditions are strictly equivalent. We have observed this many times when testing the same samples in both test protocols.

In summary, FSC/SD results obtained from the ASTM E 84 test run by used in prefer CANULC-3-102 FSC/SD results, or vice versa, with a reasonable expectation of correlation.

The product recently tested, identified as "Fiberglass" fiberglass, obtained an FSC value of 131 and an SD value of 178 (Bodycote Materials Testing Canada Inc. Report No. 04-02-001, dated July 9, 2004), when tested in accordance with the ASTM E 84 test procedure. If this same product were to be tested in accordance with CANULC-3-102 test procedure, it can be confidently predicted that similar indices with possibly a slightly higher flame spread contribution (FSC) due to the calculation difference, could be generated.

I hope this discussion meets your requirements. If you have any further questions please feel free to contact me at your convenience.

Best Regards,

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FLAME SPREAD DURALITE

Bolysols Materials Testing Canada Inc.
 A509-5777 Jackson Avenue, Chatham, Ontario N7A 6L9
 Report No. 94-03-106 Page 3 of 3

SUMMARY OF TEST PROCEDURE (continued)

Upon ignition of the gas burner, the flame spread (distance) is observed and recorded every 15 seconds. Flame spread distance versus time is plotted, allowing any flame front oscillations. If the area under the curve (A) is more than or equal to 0.75 m², 0.75 m² or 0.215-A; if greater, (SE - 4000) (0.4). Smoke developed is measured by comparing the area under the observation curve for the test sample to that of a lengthwise cut standard control panel and test rack, adjusted by a factor of 0.7 and 0.6, respectively.

TEST RESULTS

SAMPLE	85C	3D
"Vulcanol" Phenolic	110	178

Observations of Burning Characteristics

- The sample began to spew and propagate flame after approximately 45 seconds exposure to the test flame.
- The flame front propagated to a maximum distance of 18.3 (test point) at 2.5 minutes and remained there until approximately 9 minutes, at which point the sample was virtually extinguished and the flame front receded to the test rack.
- Maximum exposure of smoke developed (measured during the entire exposure of the test) corresponding with the flame distance. Smoke production then began to decrease as the sample was extinguished and flaming activity subsided (see accompanying graphs).

Authorities having jurisdiction should refer to these subgroups:

Classification	Smoke Development
Class 1 or A	0-11
Class 2 or B	26-75
Class 3 or C	76-300

[Signatures]
 Test Testing Director
 Test Testing Director

Note: This report consists of a cover page, plus additional pages that comprise the report "body". It should be considered incomplete if a page is missing.

DURABILITY REPORTS

Bolysols Materials Testing Canada Inc.
 Durability Evaluation of Duralite 1072 Profile Polystyrene Product
 Report No. 93-02-010 Page 1 of 2

1.0 INTRODUCTION

At the request of Bolysols Materials Testing Canada Inc., we intended to perform a durability evaluation of Duralite 1072 Profile Polystyrene Product to simulate installation handling.

Upon receipt, samples were assigned the following Bolysols Sample No. 02-06-30030-A to the Original position (1-281) and 02-06-30030-B for new channel product (1-272).

2.0 PROCEDURE

The sample was tested for General Handling and Installation in accordance with manufacturer's installation instructions.

3.0 RESULTS

The results are shown below:

Time	Description	Results	Comments
Carrying	10:15 Sample was carried 100 yards by one worker single panel (10)	Satisfactory	No damage
	10:25 Sample was carried 100 yards by two workers (two panels (10))	Satisfactory	No damage
Dropping	10:35 Sample (10) was dropped 10 feet from when one new panel (10) was dropped to the ground	Satisfactory	No damage
	10:45 Sample (10) was dropped 10 feet from when one new panel (10) was dropped to the ground	Satisfactory	No damage
Twisting	10:55 Sample (10) was twisted 180 degrees in the field when one new panel (10) was twisted to 180 degrees	Satisfactory	No damage
	11:05 Sample was set in a corner (panels (10)) and allowed to stay in place	Satisfactory	No damage
Cutting	11:15 Sample was cut with a hand saw (panels (10)) and cut to length	Satisfactory	No damage
	11:25 Sample was cut with a hand saw (panels (10)) and cut to length	Satisfactory	No damage
Installation	11:35 Sample was fastened in place and held up 100 lbs. (panels (10)) with a weight (panels (10)) and held in place (panels (10))	Satisfactory	No damage
	11:45 Sample was fastened in place and held up 100 lbs. (panels (10)) with a weight (panels (10)) and held in place (panels (10))	Satisfactory	No damage
Impact	11:55 Sample was fastened in place and held up 100 lbs. (panels (10)) with a weight (panels (10)) and held in place (panels (10))	Satisfactory	No damage
Stability	12:05 Sample was fastened in place and held up 100 lbs. (panels (10)) with a weight (panels (10)) and held in place (panels (10))	Satisfactory	No damage

Bolysols Materials Testing Canada Inc.
 Durability Evaluation of Duralite 1072 Profile Polystyrene Product
 Report No. 93-02-010 Page 2 of 2

Reported by: *[Signature]* Approved by: *[Signature]*

By: *[Signature]* By: *[Signature]*

Senior Technical Advisor
 Project Development
 Building Performance

Director of Engineering
 Operations Manager
 Material Technology

This report applies only to the particular samples, units, material, equipment, or other subject matter specified in it, and is issued for the use and for which no responsibility may be assumed by the quality and other control and/or testing programs single or multiple and might give different results.

ATTENTION:
 Canadian General Standards Board (CSG) (formerly Council of Canada S.I.)

REGISTRATION:
 ISO 9001:1994 registered by (DNL) Registration #001000

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