

COLONIAL COLUMN SPECIFICATIONS

ROUND COLUMNS (TAPERED AND NON-TAPERED SHAFTS) SIZES:

Turncraft manufactures a full selection of Colonial design columns in finger-joint western pine. Other species may be available upon request. Diameters range from 6" to 24" in two-inch increments (except 22"), and heights range from 4' to 30' in two-foot increments. Not all diameters are practical in all heights: please see the charts at the right for a list of standard sizes. Custom sizes may also be available. NOTE: Shaft heights are LESS than nominal height. The cap and base attach to the ends of the shaft, adding their height to the overall height of the finished column to achieve the stated nominal height.

Column shafts are manufactured from finger-joint pine, and are immersion treated in Woodlife[®] 111 (see *Wood Columns and Posts Technical Information* for further details.)

FLUTING:

On 6" through 12" tapered Colonial Columns, flutes start 9" from the top of the column shaft (measured from the scribe line) and end approximately 7" to 8" above the base (to allow field trimming).

On non-tapered shafts, flutes start 4" from the cap and end approximately 3" to 4" from the base.

Nominal		Shaft Dim	ensions		Fluting Dimensions		
Shaft Diameter*		side neter	Inside D	iameter	Number	Flute	
	Bottom	Top**	Bottom	Тор**	of Flutes	Width	
6″	5 5/8"	4 1/4"	3″	1 3/4"	15	1/2"	
8″	7 5/8"	6 1/4"	5" 3 1/2"		15	7/8"	
10"	9 5/8"	8 1/4"	7 1/8"	5 1/2"	18	7/8"	
12"	11 5/8"	10 1/4"	9"	7 1/2"	20	7/8"	
14"	13 5/8"	11″	10 3/4"	7 3/4"	24	7/8"	
16"	15 5/8"	13"	13"	10"	24	1″	
18"	17 5/8"	15″	14 3/4"	12"	27	1″	
20"	19 5/8"	17"	16 7/8"	14"	27	1″	
24"	23 5/8"	21″	20 1/4"	17 3/4"	30	1 1/2"	

*Shaft net diameters are 3/8" less than nominal.

**On non-tapered shafts, the top diameters are the same as the bottom.

Tapered Columns:

	4'	6'	8′	10'	12′	14'	16′	18′	20'	22'	24'
6″	•	•	•	•							
8″	٠	٠	٠	•	•						
10″	•	•	•	•	•	•	•				
12″	٠	٠	٠	•	•	٠	•	٠	•		
14″		•	•	•	•	•	•	•	•		
16″		٠	٠	٠	٠	٠	٠	٠	٠		
18″		•	•	•	•	•	•	٠	•		
20″			٠	٠	٠		٠	٠	٠		
24″			٠	•	•		•	٠	•	٠	•



	4'	6′	8′	10′	12'	14'	16'	18′	20'	22′	24'
6″		•	•	•							
8″		•	٠	٠							
10″		•	•	•	•						
12″			٠	٠	٠		٠				
14″			•	•	•	•	•	•			
16″			٠	٠	٠		٠	٠	٠		
18″				•	•		•	•	•		
20″					٠		٠	٠	٠		





COLONIAL COLUMN SPECIFICATIONS

FLUTING (CONT'D):

Actual lengths of the flutes for standard configurations are shown in the accompanying tables.

The extra few inches above the base allow the installer to adjust heights as needed to accommodate the variations in porch heights and slopes.

Custom flute lengths are available upon request, for the same price as standard fluted columns. Fluting typically ends 4" from the base on custom fluted columns. If using standard height columns with custom height columns, it is best to order the standard height columns custom fluted as well to match the 4" bottom spacing.

If the column is using Ornamental Capitals, the fluting is adjusted to accommodate the capital height and correct trimming at the shaft astragal (neck ring) or fillet. Please note that on shorter capitals, this will end up with a column that is shorter than nominal height. See specifications for Colonial Caps and Base for details, or our detail department and/or customer service personnel can assist you in determining correct column heights and fluting specifications for your specific applications.

	6" Through 12" Diameters											
Column	Тар	ered	Non-Tapered									
Height	Flute Length	Flute Length										
	(A)	(B)	(A)									
4'	2'-2"	0′	2'-10"									
6'	4'-2"	0′	4'-10"									
8′	6′-2″	0′	6'-10"									
10'	8'-2"	2'	8'-10"									
12'	10'-2"	4'	10'-10"									
14'	12'-2"	6′	12'-10"									
16′	14'-2"	8′	14'-10"									
18′	16'-2"	10'	16'-10"									
20′	18'-2" 12' 18'-10"											

	14" D	iameters							
Column	Тар	Non-Tapered							
Height	Flute Length	Straight Shaft	Flute Length						
	(A)	(B)	(A)						
6′	4'-2"	0′	4'-7"						
8'	6'-2"	0′	6'-7"						
10'	8'-2"	0′	8'-7"						
12′	10'-2"	0′	10'-7"						
14'	12'-2"	2′	12'-7"						
16′	14'-2"	4'	14'-7"						
18'	16'-2"	6′	16'-7"						
20'	18'-2"	18'-2" 8'							



	18" and Larger Diameters											
Column	Тар	ered	Non-Tapered									
Height	Flute Length	Flute Length										
	(A)	(B)	(A)									
6′	3'-10"	0′	4'-3"									
8'	5'-10"	0′	6'-3"									
10′	7'-10"	0′	8'-3"									
12′	9'-10"	0′	10'-3"									
14'	11'-10"	2′	12'-3″									
16′	13'-10"	4'	14'-3"									
18′	15'-10"	6′	16'-3"									
20′	17'-10"	8'	18'-3"									
22'	19'-10"	10'	20'-3"									
24'	21'-10"	12′	22'-3"									





For wood columns, inside sizes are based on the inside diameter of the polyurethane cap. Other caps (wood and ornamental capitals) have different sizes and hese numbers will not apply.

Column Diameter	Таре	red*	Non-Tapered*				
	Inside Round	Inside Square	Inside Round	Inside Square			
6″	1 1/2"	1 1/16"	2 5/8"	1 7/8"			
8″	3″	2 1/4"	4 5/8″	3 1/8"			
10"	5″	3 5/8"	6 5/8"	4 3/4"			
12"	7"	5″	8 5/8"	6″			
14"	7 5/8"	5 3/8"	9″	6 3/8"			
16″	9 3/4"	6 7/8"	10 5/8"	7 3/8"			
18″	10 13/16"	7 5/8"	12 7/8"	8 5/8"			
20"	11 3/4"	8 3/8"	13 3/8"	9 3/8"			
24″	11 3/8"	8″	13 5/8"	9 5/8"			





COLONIAL COLUMN CAP/BASE SPECIFICATIONS

ROUND COLONIAL TAPERED AND NON-TAPERED CAPS AND BASES

The Colonial style caps and bases are sized specifically for our wood Colonial column shafts and will not fit our other column products.

POLYURETHANE:

The preferred cap/base for exterior use, Poly-U-Rim[™] (reaction injection molding) components are specially designed to provide consistent detail and increased durability. Polyurethane is impervious to moisture, rot, decay and insect damage, providing strength, beauty and long life.



Column	Та	pered &	Non-Tap	ered Bas	es		Та	pered Ca	ips			Non-	Tapered	Caps	
Nominal	Plii	nth	Base I	Base Round		Cap F	Round	Aba	icus	Сар	Cap F	Round	Abacus		Сар
Diameter*	A	В	С	D	Height	E	F	G	Н	Height	I	J	K	L	Height
6″	8 1/8"	1 7/16"	6 1/8"	1 7/16"	2 7/8"	5 1/8"	1 3/16"	6 3/4"	1 1/4"	2 7/16"	6 1/8"	1 7/16"	8 1/8"	1 7/16"	2 7/8"
8″	10″	1 7/16"	8″	1 7/16"	2 7/8"	6 3/4"	1 3/16"	8 3/4"	1 1/4"	2 7/16"	8″	1 7/16"	10"	1 7/16"	2 7/8"
10"	12″	1 7/16"	10"	1 7/16"	2 7/8"	8 7/8"	1 7/16"	10 1/2"	1 7/16"	2 7/8"	10"	1 7/16"	12″	1 7/16"	2 7/8"
12″	14″	1 7/16"	12"	1 7/16"	2 7/8"	10 3/8"	1 7/16"	12″	1 7/16"	2 7/8"	12″	1 7/16"	14″	1 7/16"	2 7/8"
14"	16 3/8"	2 1/4"	14"	2 1/4"	4 1/2"	12″	2 1/4"	14″	2 1/4"	4 1/2"	14"	2 1/4"	16 3/8"	2 1/4"	4 1/2"
16″	18 3/4"	2 3/8"	16 3/8"	2 5/16"	4 11/16"	13 3/4"	2 3/8"	16″	2 3/8"	4 3/4"	16 3/8"	2 5/16"	18 3/4"	2 3/8"	2 11/16"
18"	21 5/8"	3 3/16"	18 1/2"	3 3/16"	6 3/8"	15 3/4"	3 1/8"	18 3/4"	3 1/4"	6 3/8"	18 1/2"	3 3/16"	21 5/8"	3 3/16"	6 3/8"
20"	23 3/4"	3 3/8"	20 1/2"	3 1/8"	6 1/2"	17 5/8"	3 1/4"	20 5/8"	3 1/4"	6 1/2"	20 1/2"	3 1/8"	23 3/4"	3 3/8"	6 1/2"
24"	28 1/2"	3 5/16"	24"	3 5/16"	6 5/8"	21 3/4"	3 5/16"	25″	3 5/16"	6 5/8"	24"	3 5/16"	28 1/2"	3 5/16"	6 5/8"

*Shaft net bottom diameter is 3/8" less than nominal.

WOOD:

Finger-joint pine caps and bases are not recommended for exterior use. If these are used outdoors, an aluminum plinth is required to maintain warranty coverage. FJ pine caps and bases are treated with Woodlife[®] 111 (see *Wood Columns and Posts Technical Information* for further details) unless specified otherwise.

Column	Та	pered &	Non-Tap	ered Bas	es	Tapered Caps						Non-Tapered Caps				
Nominal	Plii	nth	Base F	Round	Base	Cap F	Round	Abacus		Сар	Cap Cap Round		Abacus		Сар	
Diameter*	А	В	С	D	Height	E	F	G	Н	Height	I	J	К	L	Height	
6″	8 1/8"	1 1/2"	6 1/8"	1 1/2"	3″	5 1/8"	1 1/4"	6 3/4"	1 1/4"	2 1/2"	6 1/8"	1 1/2"	8 1/8"	1 1/2"	3″	
8″	10″	1 1/2"	8″	1 1/2"	3″	6 3/4"	1 1/4"	8 3/8"	1 1/4"	2 1/2"	8″	1 1/2"	10"	1 1/2"	3″	
10"	12″	1 1/2"	10"	1 1/2"	3″	8 7/8"	1 1/2"	10 3/8"	1 1/2"	3″	10"	1 1/2"	12"	1 1/2"	3″	
12"	14″	1 1/2"	12″	1 1/2"	3″	10 3/8"	1 1/2"	12"	1 1/2"	3″	12″	1 1/2"	14"	1 1/2"	3″	

*Shaft net bottom diameter is 3/8" less than nominal.



ORNAMENTAL CAPITAL SPECIFICATIONS

ORNAMENTAL CAPITALS FOR ROUND TAPERED WOOD COLONIAL COLUMNS

Designed with crisp, true architectural detail, Ornamental Capitals artfully capture natural themes and images. Capitals for wood Colonial columns are crafted from Poly/Resin material, providing a waterproof, strong, load-bearing product.

These Ornamental Capitals are specifically for Turncraft's tapered wood Colonial column shafts. Each style is proportionally scaled for the diameter of the shaft when the shaft is trimmed according to the architecturally correct location on the astragal. See the diagram at right for determining where the column shaft should be trimmed. Due to this trimming, the overall height of the column will need to be adjusted by the "Height Adjust" value in the following tables.

For Temple of Winds, Roman Corinthian, Empire w/Necking, Greek Erectheum w/Necking, and Modern Composite capitals, trim here:

For Greek Erectheum, Roman Ionic, Scamozzi, Empire, Greek Angular Ionic, and Roman Doric Ornamental capitals, trim here:



EMPIRE

Column	Capital	Abacus	Scroll	Height	Column	Capital	Abacus	Scroll	Height
Size	Height	Width	Width	Adjust	Size	Height	Width	Width	Adjust
6″	2 1/2"	7 1/2"	6 3/4"	-4 3/8"	16″	7 1/4"	20 1/2"	19 1/2"	-2 9/16"
8″	3 3/4"	10"	9″	-3 1/8"	18"	8 3/4"	23″	19 1/2"	-2 11/16"
10"	5 1/4"	13 1/2"	12 1/4"	-2″	20″	10″	32″	26 1/4"	-1 9/16"
12"	6 1/4"	18″	17"	-1″	22″	11 1/4"	34"	28″	-7/8″
14″	6 1/4"	18"	17″	-3 5/16"	24"	12 3/4"	35 1/2"	35″	1″



EMPIRE WITH NECKING

Column	Capital	Abacus	Scroll	Height		Column	Capital	Abacus	Scroll	Height			
Size	Height	Width	Width	Adjust		Size	Height	Width	Width	Adjust			
6″	5″	7 1/2"	6 3/4"	-1 1/4"		16"	14 1/2"	20 1/2"	19 1/2"	5 11/16"			
8″	7 3/4"	10"	9″	1 1/2"		18"	17"	23″	19 1/2"	6 9/16"			
10"	10"	13 1/2"	12 1/4"	3 3/8"		20″	15″	32″	26 1/4"	4 7/16"			
12″	11"	18″	17"	4 3/8"		22″	17 1/4"	34"	28″	6 3/8"			
14″	11″	18″	17"	2 7/16"		24″	19"	35 1/2"	35″	8 1/2"			



GREEK ANGULAR IONIC

	UILLI	LINUU	LIN ION							
ξ.	Column	Capital	Abacus	Scroll	Height	Column	Capital	Abacus	Scroll	Height
16	Size	Height	Width	Width	Adjust	Size	Height	Width	Width	Adjust
Ŷ	6″	2 3/4"	7 1/2"	6 3/4"	-4 1/8"	16"	7 1/4"	20 3/4"	19 1/4"	-2 9/16"
	8″	3 5/8"	9 1/4"	9″	-3 1/4"	18″	8 3/8"	10 1/2"	19 1/2"	-3 1/16"
	10″	5 1/8"	14 1/4"	13 3/4"	-2 1/8"	20″	9 3/4"	24 1/4"	19 3/4"	-1 13/16"
	12″	6″	17 1/4"	17"	-1 1/4"	22"	11"	29 3/4"	28″	-1 1/8"
	14"	6"	17 1/4"	17"	-3 9/16"	24"	12 3/4"	35″	34 1/2"	1″



GREEK ERECTHEUM

Column	Capital	Abacus	Scroll	Height		Column	Capital	Abacus	Scroll	Height
Size	Height	Width	Width	Adjust		Size	Height	Width	Width	Adjust
6″	3 1/4"	6 3/4"	8 1/2"	-3 5/8"		16″	7″	15″	21″	-2 13/16"
8″	3 3/4"	7 3/4"	11 3/4"	-3 1/8"	1	18"	9″	17 1/2"	26″	-2 7/16"
10″	5 1/4"	10 1/2"	15″	-2″		20"	10"	22 1/2"	29″	-1 9/16"
12″	6 1/4"	14 1/2"	21″	-1″		22″	11″	26″	36″	-1 1/8"
14″	6 1/4"	14 1/2"	21″	-3 5/16"		24″	13″	30 1/2"	43″	1 1/4"



GREEK ERECTHEUM WITH NECKING

	UILLI			VIIII IVI	DIMINU					
	Column	Capital	Abacus	Scroll	Height	Column	Capital	Abacus	Scroll	Height
1	Size	Height	Width	Width Adjust		Size	Height	Width	Width	Adjust
	6″		Ν	1/A		16"	11 1/4"	15″	21″	2 7/16"
	8″	5 3/4"	7 3/4"	11 3/4"	-1/2"	18"	13 1/2"	17 1/2"	26″	3 1/16"
	10″	7 1/2"	10 1/2"	15″	7/8″	20"	15″	22 1/2"	29″	4 7/16"
	12″	8 1/2"	12″	17 1/4"	1 7/8"	22"	17"	26″	36″	6 1/8"
	14"	9 1/2"	14 1/2"	21″	15/16"	24″	19″	30 1/2"	43″	8 1/2"



ORNAMENTAL CAPITALS FOR ROUND TAPERED WOOD COLONIAL COLUMNS (CONT'D)



MODERN COMPOSITE

Column	Capital	Abacus	Height	Column	Capital	Abacus	Height
Size	Height	Width	Adjust	Size	Height	Width	Adjust
6″	6 1/2"	7 1/2"	1/4"	16″	17″	20″	8 3/16"
8″	8 1/2"	10 3/4"	2 1/4"	18″	N/A		
10"	11 1/2"	16 1/2"	4 7/8"	20"	22 1/2"	25″	11 15/16"
12″	12 1/4"	16 1/2"	5 5/8"	22″	N/A N/A		
14"	14 1/2"	19″	5 15/16"	24"			



Roman Corinthian

Column	Capitai	Abacus	Height	Column	Capital	Abacus	Height
Size	Height	Width	Adjust	Size	Height	Width	Adjust
6"	5 3/4"	8″	-1/2"	16″	17"	22″	8 3/16"
8″	8 1/2"	12″	2 1/4"	18″	20"	27"	9 9/16"
10"	11"	13"	4 3/8"	20″	23″	32 1/2"	12 7/16"
12″	13 7/8"	17 3/4"	7 1/4"	22″	25 1/2"	39″	14 5/8"
14″	14 1/2"	18 1/2"	5 15/16"	24"	28 1/2"	42″	18″

Column

Conital

Abaaur

Hoight

Hoight



ROMAN DORIC ORNAMENTAL

Column	Capital	Abacus	Height		Column	Capital	Abacus	Height			
Size	Height	Width	Adjust		Size	Height	Width	Adjust			
6″	4"	8 3/4"	-2 1/4"		16″	9"	21″	3/16"			
8″	4 1/2"	10 1/2"	-1 3/4"		18″	10 1/2"	24″	1/16″			
10"	6″	14 1/4"	-5/8″		20"	12 1/2"	28″	1 15/16"			
12"	7″	16 1/4"	3/8″		22″	N/A N/A					
14"	8 1/2"	17 3/4"	-1/16"		24"						



ROMAN IONIC

-											
Column	Capital	Abacus	Scroll	Height		Column	Capital	Abacus	Scroll	Height	
Size	Height	Width	Width	Adjust		Size	Height	Width	Width	Adjust	
6″	2 1/4"	6 1/8"	8 1/16"	-4 5/8"		16″	6 1/8"	17 1/2"	22″	-3 11/16"	
8″	3″	8 1/4"	10 1/2"	-3 7/8"		18"	6 1/4"	20″	24 1/4"	-5 3/16"	
10"	3 5/8"	10 1/2"	13 1/2"	-3 5/8"		20″	6 1/4"	20″	24 1/4"	-5 5/16"	
12″	4 1/2"	12 1/2"	16 1/2"	-2 3/4"		22″	8 3/4"	25″	31 3/4"	-3 3/8"	
14"	4 1/2"	12 1/2"	16 1/2"	-5 1/16"		24"	9″	25 1/4"	33″	-2 3/4"	



S CAMO	SCAMOZZI											
Column	Capital	Abacus	Scroll	Height		Column	Capital	Abacus	Scroll	Height		
Size	Height	Width	Width	Adjust		Size	Height	Width	Width	Adjust		
6"	2 1/2"	6 1/2"	5 1/4"	-4 3/8"		16″	5 1/2"	19"	16 3/4"	-4 5/16"		
8″	2 7/8"	10"	8″	-4"		18"	6 1/4"	22 1/2"	18 1/2"	-5 3/16"		
10″	3 1/2"	11″	9 3/8"	-3 3/4"		20"	7 1/2"	25″	20 1/4"	-4 1/16"		
12"	4 7/8"	16 3/4"	14"	-2 3/8"		22"	8 1/2"	28 1/2"	24"	-3 5/8"		
14″	5″	17 1/2"	15 1/2"	-4 9/16"		24″	10 1/4"	34 1/4"	29 1/2"	-1 1/2"		

TEMPLE OF WINDS

Column	Capital	Abacus	Height	Column	Capital	Abacus	Height
Size	Height	Width	Adjust	Size	Height	Width	Adjust
6"	6″	6"	-1/4"	16″	16"	19"	7 3/16"
8″	7″	8″	3/4"	18″	16"	23″	5 9/16"
10"	10"	13 7/8"	3 3/8″	20"	18 1/8"	26 3/4"	7 9/16"
12"	11 5/8"	16 7/8"	5″	22″	23 1/4"	34 1/2"	12 3/8"
14"	11 5/8"	16 7/8"	3 1/16"	24"	24″	35″	13 1/2"





WOOD COLUMNS AND POSTS

TECHNICAL INFORMATION:

Our parent corporation, Cascade Wood Products, is a member of the Window and Door Manufacturers Association (WDMA), and have received Hallmark Certification (Certificate #240) for our use of Kop-Coat's Woodlife® 111. Woodlife® 111 is a clear penetrating, non swelling, paintable water repellent wood preservative. It helps control the growth of decaying fungi, staining fungi, and surface mold and mildew to meet the WDMA Industry Standard for a water repellent preservative (WDMA Standard I.S.-4). It stabilizes wood against the effects of moisture and reduces dimensional changes that can cause swelling, warping and splitting. No other major column manufacturer provides this level of protection for their wood products!

"The WDMA Hallmark Certification Program gives specifiers a method of identifying windows, doors and skylights which are manufactured in accordance with WDMA standards. The WDMA Hallmark is considered a mark of excellence among architects, contractors and other specifiers and is accepted industry-wide. WDMA Standards are referenced by HUD/FHA in their Minimum Property Standards and by many other government agencies in their construction specifications. Any manufacturer who can demonstrate conformance to the WDMA standards is eligible to participate in the Hallmark Certification Program. Conformance is determined by in-plant inspection of the manufacturing facilities and by sampling and testing of products. The manufacturer is issued a Certification number, along with marking devices for applying the Hallmark to conforming products.

The WDMA Hallmark Certification Program is ongoing. Unannounced inspections and periodic laboratory tests are conducted throughout the year to insure continuing compliance to the requirements of the program.

The WDMA Hallmark Certification Program is conducted in accordance with the provisions of the American National Standards Institute (ANSI) requirements and ISO/IEC Guide 65, General Requirements for Bodies Operating Product Certification Systems."⁺

Our column manufacturing process begins with select, kiln-dried finger-jointed woods, conserving valuable wood resources, reducing the potential for warping and bow, and helping to prevent checking or cracking of finished surfaces. Next, the individual staves are precisely shaped to provide the correct taper for the column, assembled using the strongest Type-I waterproof glue, and then metal-banded for curing. These torque bands apply 90 to 100 pounds of pressure per square inch, transforming the individual staves into a single unit, ready for precision turning. After our customized lathes turn the shaft and the finely carved details of the neck and astragal, they are sanded, immersion treated with Woodlife[®] 111[‡], and visually examined for any blemishes, which are then corrected before being carefully packaged for shipping to our customers.

Other optional services provided by Turncraft to ensure the long life and enduring beauty of our wood products include factory priming[‡] and asphalt coating. Our primer has been specially formulated for columns exclusively for Turncraft, and is applied in two coats. The column is sanded before each coat. Asphalt coating can be applied to the interior of the column shaft, helping to prevent the absorption of condensation which occurs naturally in exterior installations. Since priming and asphalt coating are required for warranty coverage, having the factory apply these options adds value to the column, increasing retail profitability.

Porch posts components are also select kiln-dried finger-jointed woods, and are precision moulded, glued with Type-I waterproof glue, assembled and clamped with pneumatically operated equipment to ensure excellent adhesion along the entire length of the post glue seams. After the glue has cured, the post is again processed through the moulders, giving the post perfectly square, milled surfaces. The post is then turned on our lathes, sanded, and visually inspected. Any blemishes are corrected, then the posts are immersion treated in Woodlife[®] 111, and palletized or carton packed for protection during shipping. Porch posts can also be ordered with factory priming, adding extra value in the marketplace.[‡]

Turncraft now has an added level of protection available for our most popular porch posts. Our Post Defense program offers an unprecedented 10 year warranty! By applying an effective method of controlling moisture and inhibiting the growth of fungal decay we have engineered the finest, longest-lasting turned wood post available. Post Defense porch posts are also available with a 100% acrylic primer[‡], adding even more protection and value.

- * Further information on Woodlife® 111 is available at the Kop-Coat web site: www.kop-coat.com
- + This quote is from www.wdma.com/i4a/pages/index.cfm?pageid=3595
- [‡] Factory primed posts and columns are not treated with the Woodlife[®] 111 product.