Tougher Codes lead to

As many as 15 hurricanes have occurred in the Atlantic in a single year. That's why states along the Atlantic seacoast are following the lead of Miami-Dade County, Florida – making building codes tougher. This encourages the use of building practices and products that may help minimize hurricane damage.

How can you protect your home or business? Among other precautions, be sure to add Kolbe & Kolbe's impact-approved windows and doors to your building plans. While many windows include impact-approved glass, Kolbe & Kolbe offers *impact-approved products*. This means that the *entire unit* has been designed to withstand harsh weather, not just the glass. Depending on the unit, this may mean that more locks are applied and/or special glazing procedures are employed. Plus, these products include Sea-Storm® large missile impact glass by Cardinal LG.

Kolbe & Kolbe Impact Products Tested to Miami-Dade Co. Protocols PA-201, PA-202 & PA-203

(These units comply with the test requirements of the International Building Code, International Residential Code, Standard Building Code, and Texas Department of Insurance; updated October 11, 2002)

	Miami-Dade Co.								
Heritage Series Products Manor Door (6-0 x 8-0 French w/ HP & IP; act./act. or stat./act. or stat./act. or stat./stat.) mulled w/ 1/4" steel plate to a Transom (6-0 x 5-0 w/ HP & IP)	Test AWS/Impact	Design Pressure HGD-LC65	Acceptance No. 02-0614.05/ 02-0617.02	Exp.Date 24 Oct. 07	Structural Test ±97.50 psf				
Manor Door (3-0 x 8-0 w/ HP & IP; act. or stat.) mulled w/ a 1/4" steelplate to a Manor Door (6-0 x 8-0 French w/ HP & IP; act./act.) mulled w/ a 1/4" steel plate to a Manor Door (3-0 x 8-0 w/ HP & IP; act. or stat.)	AWS/Impact	HGD-LC65	02-0614.05/ 02-0617.02	24 Oct. 07	±97.50 psf				
Manor Door (6-0 x 6-8 w/ HP & IP French; act./act. or act./stat. or stat./stat.)	AWS/Impact	HGD-LC70	02-0614.05/ 02-0617.02	24 Oct. 07	±105.00 psf				
Seg. Head and Circle Top Manor Door (6-0 x 8-0 w/ HP & IP French; act./act. or act./stat. or stat./stat.)	AWS/Impact	HGD-LC65	02-0614.05/ 02-0617.02	24 Oct. 07	±97.50 psf				
Manor Door Transom (Segmented and Rectagular 74-7/8" x 60" w/ HP & IP)	AWS/Impact	F-C70	02-0614.06/ 02-0617.05	24 Oct. 07	±105.00 psf				
Manor Door Transom (Half Round 74-7/8" x 37-7/16" w/ HP & IP)	AWS/Impact	F-C70	02-0614.06/ 02-0617.05	24 Oct. 07	±105.00 psf				
Casement (3-0 x 6-0 w/ HP & IP; fixed or oper.)	AWS/Impact	C-LC65	02-0125.06/.07	28 Jun. 06	±97.50 psf				
Half-Circle Top Csmt. (3-0 x 6-0 w/ HP & IP; fixed or oper.)	AWS/Impact	C-LC65	02-0125.06/.07	28 Jun. 06	±97.50 psf				
Seg. Head Csmt. (3-0 x 6-0 w/ HP & IP; fixed or oper.)	AWS/Impact	C-LC65	02-0125.06/.07	28 Jun. 06	±97.50 psf				
Casement (3-0 x 6-0 w/ HP & IP; fixed or oper.) mulled w/ 1/4" steel plate to a Fixed Csmt. (5-0 x 6-0 w/ HP & IP)	AWS/Impact	C-LC65	02-0125.06/.07	28 Jun. 06	±97.50 psf				
Seg. Head Csmt. (3-0 x 6-0 w/ HP & IP; fixed or oper.) 2-wide; mulled with 1/4" steel plate	Impact	C-LC65	02-0125.06/.07	28 Jun. 06	±97.50 psf				
Half-Circle Top Csmt. (3-0 x 6-0 w/ HP & IP; fixed or oper.) 2-wide; mulled with 1/4" steel plate	AWS/Impact	C-LC65	02-0125.06/.07	28 Jun. 06	±97.50 psf				
Awning (3-0 x 2-0 w/ HP & IP; fixed or oper.)	AWS/Impact	AP-LC65	02-0125.06/.08	28 Jun. 06	±97.50 psf				
Awning (4-0 x 3-0 w/ HP & IP; fixed or oper.)	AWS/Impact	AP-LC65	02-0125.06/.08	28 Jun. 06	±97.50 psf				
Aluminum Tube Mullions-Clipped	AWS	Struct. 97.5	99-1210.05	02 Nov. 03	-146.25 psf				
Alum. Tube Mullions-Reinforced-Clipped	AWS	Struct. 97.5	99-1210.04	02 Nov. 03	-146.25 psf				

Ultra Series Products Manor Door (6-0 x 8-0 French w/ HP & IP; act./act. or act./stat. or stat./stat.) mulled w/ 1/4" steel plate to a Transom (6-0 x 5-0 w/ HP & IP)	AWS/Impact	HGD-LC65	02-0617.01/.03	24 Oct. 07	±97.50 psf
Manor Door (3-0 x 8-0 w/ HP & IP; act. or stat.) mulled w/ a 1/4" steelplate to a Manor Door (6-0 x 8-0 French w/ HP & IP; act./act. or act./stat. or stat./stat.) mulled w/ a 1/4" steel plate to a Manor Door (3-0 x 8-0 w/ HP & IP; stat.)	AWS/Impact	HGD-LC65	02-0617.01/.03	24 Oct. 07	±97.50 psf
Manor Door (6-0 x 6-8 w/ HP & IP French; act./act. or act./stat. or stat./stat.)	AWS/Impact	HGD-LC70	02-0617.01/.03	24 Oct. 07	±105.00 psf
Seg. Head and Circle Top Manor Door (6-0 x 8-0 w/ HP & IP French; act./act. or act./stat. or stat./stat.)	AWS/Impact	HGD-LC65	02-0617.01/.03	24 Oct. 07	±97.50 psf
Manor Door Transom (Segmented and Rectagular 74-7/8" x 60" w/ HP & IP)	AWS/Impact	F-C70	02-0617.04/.06	24 Oct. 07	±105.00 psf
Manor Door Transom (Half Round 74-7/8" x 37-7/16" w/ HP & IP)	AWS/Impact	F-C70	02-0617.04/.06	24 Oct. 07	±105.00 psf
Casement (3-0 x 6-0 w/ HP & IP; fixed or oper.)	AWS/Impact	C-LC65	02-0125.06/.07	28 Jun. 06	±97.50 psf
Half-Circle Top Csmt. (3-0 x 6-0 w/ HP & IP; fixed or oper.)	AWS/Impact	C-LC65	02-0125.06/.07	28 Jun. 06	±97.50 psf
Seg. Head Csmt. (3-0 x 6-0 w /HP & IP; fixed or oper.)	AWS/Impact	C-LC65	02-0125.06/.07	28 Jun. 06	±97.50 psf
Casement (3-0 x 6-0 w/ HP & IP; fixed or oper.) mulled w/ 1/4" steel plate to a Fixed Csmt. (5-0 x 6-0 w/ HP & IP)	AWS/Impact	C-LC65	02-0125.06/.07	28 Jun. 06	±97.50 psf
Seg. Head Csmt. (3-0 x 6-0 w/HP & IP; fixed or oper.) 2-wide; mulled w/ 1/4" steel plate	AWS/Impact	C-LC65	02-0125.06/.07	28 Jun. 06	±97.50 psf
Half-Circle Top Csmt. (3-0 x 6-0 w/ HP & IP; fixed or oper.) 2-wide; mulled w/ 1/4" steel plate	AWS/Impact	C-LC65	02-0125.06/.07	28 Jun. 06	±97.50 psf
Awning (3-0 x 2-0 w/ HP & IP; fixed or oper.)	AWS/Impact	AP-LC65	02-0125.06/.08	28 Jun. 06	±97.50 psf
Awning (4-0 x 3-0 w/ HP & IP fixed or oper.)	AWS/Impact	AP-LC65	02-0125.06/.08	28 Jun. 06	±97.50 psf
Magnum Series Products					
Wood Double Hung (50.12" x 65.00" w/ HP; oper.)	AWS	H-R65	00-0524.04	04 Sept. 03	±97.50 psf
Clad Double Hung (50.12" x 65.00" w/ HP; oper.)	AWS	H-R65	00-1114.08	04 Sept. 05	±97.50 psf

HP=High Performance Option • IP=Impact Performance Option • AWS=Air, Water, Structural

NOTES:

- Impact glass is laminated glass and, therefore, is NOT insulating glass; it is warranted for five years against delamination which may materially obstruct vision. It is available with a gray or bronze tint and/or a LoE coating. Sash with laminated glass are available only as one-lites; i.e., Simulite is the only available divided lite option.
- In general, Manor doors with the IP option use Sea-Storm® type B glass (5.7 SSB Lami); casements and awnings with the IP option use Sea-Storm® type B glass (4.7 SSB Lami or 5.7 SSB Lami for casements, or 3.9 SSB Lami for awnings).
- In general, Heritage Series products are wood or wood with roll-formed aluminum cladding on the exterior. Ultra Series products are wood with extruded aluminum frames and roll-formed aluminum sash (in most cases) on the exterior. Magnum Series products are wood or wood with extruded aluminum cladding on the frame exterior and roll-formed aluminum cladding (in most cases) on the sash exterior.
- Consult your Kolbe & Kolbe dealer for more specific information about how each product is prepared for impact performance, for brochures detailing Sea-Storm® glass by Cardinal LG, additional sizes & shapes that may be available, or for more detailed descriptions of Heritage, Ultra and Magnum Series products.

