

March 31, 2021

Mr. Doug Slape Chief Deputy Commissioner Texas Department of Insurance 333 Guadalupe Austin, TX 78701

Dear Mr. Slape:

We enclose information responsive to the requirements set forth in Section 2210.453 of the Texas Insurance Code and 28 Texas Administrative Code §5.4160 relating to the association's determination of the amount equal to the probable maximum loss for the association for a catastrophe year with a probability of one in 100 and the association's method for determining that probable maximum loss. Please contact the Texas Windstorm Insurance Association's Chief Financial Officer Jerry Fadden with any questions or requests for additional information.

Sincerely,

ohn Polak

John Polak General Manager

Texas Windstorm Insurance Association 2021 Catastrophe Year Disclosure to the Commissioner Section 2210.453 of the Texas Insurance Code and 28 Texas Administrative Code §5.4160

Disclosure Requirement		Model #1	Model #2		
§5.4160(d)(1) §5.4160(d)(2)	The hurricane model or models the Association relied on, including the model vendors, the model names, and the versions of each model; The in-force date and the total amount of direct exposures in force for the policy data used as the input	Model Vendor: Risk Management Solutions, Inc. (RMS) Model Name: North Atlantic Hurricane Models Model Version: RMS RiskLink 18.1 Windstorm/Hurricane and Convective Storm (WS/CS) In-force Date: 11/30/2020 Direct Exposures: Total Insured Values (TIV): \$66.315.306.314	Model Vendor: AIR Worldwide Corporation Model Name: AIR Hurricane Model for the United States Model Version: AIR Touchstone 8.0 Tropical Cyclone (TC) and AIR Touchstone 8.0 Severe Thunderstorm (ST) In-force Date: 11/30/2020 Direct Exposures: Total Insured Values (TIV): \$66.315.306.314		
	for each hurricane model the association relied on;	Total Policy Limits: \$60,729,663,104 Risk Count: 196,129	Total Policy Limits: \$60,729,663,104 Risk Count: 196,129		
§5.4160(d)(3) §5.4160(d)(4)	All user-selected hurricane model input assumptions used with each hurricane model the association relied on; The one-in-100-year probable maximum loss model output	 Assumptions: All Perils (Windstorm/Hurricane and Severe Convective Storms). Aggregate Annual Loss estimate. Windstorm/Hurricane frequency –RMS 2019 Stochastic (Near Term) Event Rates. Severe Convective Storm frequency –RMS 2013 Stochastic (Near term) Event Rates. With post-event loss amplification (PLA) ("Demand Surge") for Windstorm /Hurricane. Severe Convective Storm excludes loss amplification (not available as an option in CS). Without Storm Surge. Exhibit A includes additional assumptions. 	 Assumptions: All Perils (Tropical Cyclone - Wind and Severe Thunderstorm). Aggregate Annual Loss estimate. Tropical Cyclone frequency - 10K US AP (2020) Warm Sea Surface Temperatures (WSST) frequency set. Severe Thunderstorm frequency - 10K US AP (2020) – Standard. With Demand Surge for Tropical Cyclone - Wind and Severe Thunderstorm. Without Storm Surge. Exhibit A includes additional assumptions One-in-100-year PML: \$4,295,784,474 		
	maximum loss model output produced by each hurricane model the Association relied on;				
§5.4160(d)(5)	If the association relied on more than one hurricane model, the methodology the association used to blend or average the hurricane model outputs, including all weighting factors used;	Blending methodology: The aggregate annual loss output from each of the two models described herein were combined using a weighting of 50% RMS and 50% AIR to produce a combined one-in- 100-year aggregate loss estimate of \$3,505,221,586 excluding any provision for estimated loss adjustment expenses.	Blending methodology: The aggregate annual loss output from each of the two models described herein were combined using a weighting of 50% RMS and 50% AIR to produce a combined one-in- 100-year aggregate loss estimate of \$3,505,221,586 excluding any provision for estimated loss adjustment expenses.		

Texas Windstorm Insurance Association 2021 Catastrophe Year Disclosure to the Commissioner Section 2210.453 of the Texas Insurance Code and 28 Texas Administrative Code §5.4160

§5.4160(d)(6)	Any adjustments the association or	Adjustments:	Adjustments:
	another party made to the one-in-	The combined one-in-100-year aggregate loss estimate	The combined one-in-100-year aggregate loss estimate
	100-year probable maximum loss	described in §5.4160(d)(5) was increased by a factor of	described in §5.4160(d)(5) was increased by a factor of
	model outputs or the blended or	15% to account for estimated loss adjustment expenses to	15% to account for estimated loss adjustment expenses to
	averaged output, including any	yield \$4,031,004,824. This amount was rounded to the	yield \$4,031,004,824. This amount was rounded to the
	adjustments to include loss	nearest \$10 million to derive the one-in-100-year probable	nearest \$10 million to derive the one-in-100-year probable
	adjustment expenses.	maximum loss for the catastrophe year 2021 of	maximum loss for the catastrophe year 2021 of
		\$4,030,000,000.	\$4,030,000,000.

Exhibit A

Additional information under §5.4160(d)(3) All user-selected hurricane model input assumptions used with each hurricane model the association relied on.

RMS settings

Modeling Parameters

Portfolio	Hurricane Near Term	Hurricane Long Term	Severe Convective Storm
Vendor	RMS	RMS	RMS
Model	RiskLink	RiskLink	RiskLink
Version	18.1	18.1	18.1
In-Force	11/30/2020	11/30/2020	11/30/2020
Peril	Windstorm/Hurricane	Windstorm/Hurricane	Convective Storm
Primary Peril	Wind	Wind	Tomado
Sec Peril	None (excludes Storm Surge)	None (excludes Storm Surge)	Hail + Wind
Event Losses Include	NA	NA	Low Freq (OEP); Low+High Freq (AEP)
Country	United States	United States	United States
Currency	USD	USD	USD
PLA/DS	with Loss Amplification	with Loss Amplification	excludes Loss Amplification (not an option)
Vulnerability	Default	Default	Default
Frequency	RMS 2019 Stochastic Event Rates	RMS 2019 Historical Event Rates	RMS 2013 Stochastic Event Rates

AIR settings

Modeling Parameters

Portfolio	Hurricane Near Term	Hurricane Long Term	Severe Thunderstorm				
Vendor	AIR	AIR	AIR				
Model	Touchstone	Touchstone	Touchstone				
Version	8.0	8.0	8.0				
In-Force	11/30/2020	11/30/2020	11/30/2020				
Peril	Tropical Cyclone - Wind	Tropical Cyclone - Wind	Severe Thunderstorm				
Sec. Perils	None (excludes Storm Surge)	None (excludes Storm Surge)	Hail + Straight-Line Winds + Tornado				
Country	United States	United States	United States				
Currency	USD	USD	USD				
PLA/DS	with Demand Surge	with Demand Surge	with Demand Surge				
Event Set	10K US AP (2020) - Warm SST	10K US AP (2020) - Standard	10K US AP (2020) - Standard				
	Disaggregation: ON						
Financial Settings	Average Properties: Automatic						
All Perils	For Invalid Con/Occ Pairs: Use System Default						
	Apply location terms for residential co	ntracts: Deductibles before limits					

General Information about exposure data for model inputs

- Data is current as of November 30, 2020.
- Each record in the data set represents one risk, defined as a single building and/or location.
- The data included 185,187 policies and 196,129 locations.
- The following process is taken for geocoding:
 - 1. Import/geocode in RMS.
 - 2. Pull RMS lat/long and include in the AIR import files.
 - 3. Geocode in AIR using the user supplied lat/long.
 - 4. Keep reported County in Location User Defined1 for reporting purposes.

- The perils of hurricane and tornado/hail will be modeled in AIR Touchstone version 8 and RMS RiskLink v18.1.
- The data was reported with a "Wind Excluded" flag of N for all policies. Therefore, all policies will be assumed to be covered for hurricane.
- All data assumptions to follow will be based on 185,187 policies and 196,129 locations.

Deductibles

• Building and Contents deductibles were reported as coverage level for Commercial, Residential, and Mobile Home and will be modeled as reported.

Limits and Values

- Limits and values were provided for Building, Contents and Time Element. There were no limits or values provided for Appurtenant Structures. It is included in the Building coverage. Per TWIA's instruction, only the value field should be used as model input. The reported coverage limit is to be used where the reported value is zero (the only cases were 10,151 Contents in this data set).
- Site blanket limits were provided for all records as the sum of the site coverage limit fields subject to the statutory limits. These will be used to cap losses at the site level.

Risk Characteristics

• Construction was reported and will be modeled as follows:

TWIA Code	RMS Code	RMS Description	AIR Code	AIR Description	Total Limits	Risk Count
Brick	2	Masonry	111	Masonry	\$2,905,137,465	8,344
Brick Veneer	1 w/ Clad Sys 1	Wood w/ Brick Veneer	103	Masonry Veneer	\$31,682,129,494	92,383
Frame	1	Wood	101 Wood Frame		\$23,907,138,113	90,236
MH Tied (set based on Type of Business)	5B	Mobile Home (w/ tie down)	194	Mobile Home (full tie down)	\$40,988,532	745
Semi Wind Resistant	4	Steel	182	Semi-wind Resistive	\$900,327,175	1,034
Wind Resistant	4	Steel	183	Wind Resistive	\$1,274,260,090	2,907
Not Applicable	0	Unknown	100	Unknown	\$19,682,236	480
Totals					\$60,729,663,104	196,129

Occupancy Type	RMS Occupancy Conflictant	ular Snip AIR Occupancy	Total Limits	Risk count
Commercial	37 – General Commercial	311 – General Commercial	\$5,779,935,035	11,465
Commercial Farm	20 – Agriculture	373- Agricultural Misc.	\$9,218,805	96
Governmental	23 – General Services	343- General Services	\$240,284,776	100
Mobile/Manufactured Home	1 – Single family	302- Single Family Home	\$40,988,532	745
Residential	1 – Single family	302- Single Family Home	\$54,595,380,938	183,565
Residential Farm	20 – Agriculture	373- Agricultural Misc.	\$63,855,018	158
Totals			\$60,729,663,104	196,129

• Occupancy was reported and will be modeled as follows:

- The number of stories was reported and will be modeled if valid. There are 2,955 locations with no number of stories that will be modeled as unknown.
- Year built was reported and will be modeled if valid. There are 745 locations with no year built that will be modeled as unknown. Also, 6 locations with a year built greater than the inception date year will be reset to the inception date year. Total limits, by year of construction band, to be modeled will be as follows:

Year Built	Total Limits	Risk Count
Unknown	\$40,988,532	745
<=1994	\$33,151,904,653	123,554
1995 to 2001	\$7,023,120,100	18,717
2002 to 2008	\$10,745,096,673	27,864
>=2009	\$9,768,553,146	25,249
Total	\$60,729,663,104	196,129

- Square footage was reported and will be modeled if valid. 8,062 locations with no square footage or square footage greater than 2M will be modeled as unknown. Currently, RMS only uses square footage for residential and low-rise commercial structures. For AIR, this field is only used for larger high value homes for the hurricane peril.
- Updated Occupancy and Secondary Modifiers

The following pages includes details regarding occupancy and secondary modifier updates.

Texas Windstorm Insurance Association Data as of 11/30 2020 Occupancy

Use the field "CONF_CLASS_CD" n PC data for occupancy if provides better detail and significant IV contribution Otherwise use the "Occupancy_ ype" reported in Location data

CONF_CLASS_CD	CONF_CLASS_CD_SHORT_TEXT	Occupancy_Type as provided in Orig Data	RMS Occupancy Cod	e RMS Occupancy Description	AIR Occupancy Code as Modeled	AIR Occupancy Description	τιν	Risk Count	% of Total Value
A02	Building Apartment house schedule 1 or 2 Units FRAME BV BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	23 041 797	143	0.0%
A03	Building Apartment house schedule 3 Thru 7 Units HC WR SWR	Commercial	2	Permanent Dwelling Multi Fam ly	303	Permanent Dwelling Multi Family	4 495 961	6	0.0%
A04	Building Apartment house schedule 3 Thru 7 Units, FRAME, BV, BRICK	Commercial	2	Permanent Dwelling Multi Fam ly	303	Permanent Dwelling Multi Family	116,781,807	361	0.2%
A05	Building Apartment house schedule 8 or more Units HC WR SWR	Commercial	2	Permanent Dwelling Multi Fam ly	306	Apartments/Condominiums	2 339 835	1	0.0%
A06	Building Apartment house schedule 8 or more Units FRAME BV BRICK	Commercial	2	Permanent Dwelling Multi Fam ly	306	Apartments/Condominiums	208 597 579	267	0.3%
A08	Contents Apartment house schedule 1 or 2 Units FRAME BV BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	10 000	1	0.0%
A10	Contents Apartment house schedule 3 or more Units FRAME BV BRICK HC	Commercial	2	Permanent Dwelling Multi Fam ly	303	Permanent Dwelling Multi Family	500 000	1	0.0%
A12	Outbuilding Apartment house schedule FRAME_BV_BRICK	Commercial	2	Permanent Dwelling Multi Fam ly	303	Permanent Dwelling Multi Family	5 065 046	30	0.0%
A15	HHG Apartment house residential (1-2 Units) FRAME BV BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	2 322 200	56	0.0%
A17	HHG Apartment house residential (3 or more) FRAME BRICK UK HC	Residential	2	Permanent Dwelling Multi Fam ly	303	Permanent Dwelling Multi Family	11 901 253	327	0.0%
R10	In G Apartment nouse residential (3 or more) will swart with a sector of the sector of	Residential	27	Conoral Commonial	303	Concern Commercial	242 440	70	0.0%
B01 B02	18 Builders Risk Dweling and F&R Dweling Original Construction Form 18	Commercial	37	General Commercial	311	General Commercial	386 244	70	0.0%
B034	18 Builders Risk Dwelling and F&R Dwelling we additions and exceeding 10% Form 18 (BR)	Commercial	37	General Commercial	311	General Commercial	3 524 100	11	0.0%
B03B	Builders Bisk Dwelling Renaits/Improvements Form 21	Commercial	37	General Commercial	311	General Commercial	35 096 125	178	0.1%
B04	18 Builders Risk COMMERCIAL AND F&R NON-DWELLING / ORIGINAL CONSTRUCTION	Commercial	37	General Commercial	311	General Commercial	573 000	2	0.0%
B06D	Builders Risk Commercial Repairs/Improvements Form 21	Commercial	37	General Commercial	311	General Commercial	22 679 729	16	0.0%
B07	21 Builders Risk DWELLING AND F&R DWELLING / ORIGINAL CONSTRUCTION	Commercial	37	General Commercial	311	General Commercial	227 130 246	668	0.3%
B09A	21 Builders Risk DWELLING AND F&R DWELLING WITH ADDITONS EXCEEDING 10% (BR)	Commercial	37	General Commercial	311	General Commercial	390 000	3	0.0%
B09B	Builders Risk Residential Repairs/Improvements Form 18	Commercial	37	General Commercial	311	General Commercial	890 000	5	0.0%
B10	21 Builders Risk COMMERCIAL AND F&R NON-DWELLING / ORIGINAL CONSTRUCTION	Commercial	37	General Commercial	311	General Commercial	12 044 432	15	0.0%
B12D	Builders Risk Commercial Repairs/Improvements Form 18	Commercial	37	General Commercial	311	General Commercial	3 489 365	7	0.0%
CML01	Building Commercial FRAME BV BRICK	Commercial	37	General Commercial	311	General Commercial	2 554 886 246	4 856	3.9%
CML02	Building Commercial HC WR SWR	Commercial	37	General Commercial	311	General Commercial	2 193 033 846	578	3.3%
CML03A	Building / Contents BLANKET "PUBLIC" SCHOOLS Frame BV Brick	Governmental	25	Education	345	Universities Colleges and Techincal Schools	120 001 328	45	0.2%
CML04A	Building / Contents BLANKET "PUBLIC" SCHOOLS HC WR SWR	Governmental	25	Education	345	Universities Colleges and Techincal Schools	823 002 616	55	1.2%
CML05	Contents Commercial (all constructions)	Commercial	37	General Commercial	311	General Commercial	243 614 776	1 402	0.4%
CML00	Building / Contents BLANKET COURCH	Commercial	22	Religion and NonProl L	341	Religion and Non-Profit	7 524 244	124	0.2%
CML09	Building / Contents PRIVATE SCHOOL BLANKET COVERAGE	Commercial	20	Education	345	Concersi Commercial	2 400 000	27	0.0%
CML10	INTER RESIDENTIAL HITE IN COMMERCIAL BLOG	Commorgial	2	Temp Lodging	304	Temperany Ledging	2 499 000	31	0.0%
CON01	Building Coolining & BOARDING HOUSES FRAME BY BRICK	Commercial	42	Multi-Eamily Dwelling Homeowners Association	306	Apartmente/Condominiume	1 482 570 238	231	2.2%
CON02	Building Condominiums Association FRAME BV BRICK	Commercial	42	Multi-Family Dwelling-Homeowners Association	306	Apartments/Condominiums	803 000 161	801	1.2%
CON03	Outbuilding Condominiums Association HC WR SWR	Commercial	42	Multi-Eamly Dwelling-Homeowners Association	306	Apartments/Condominiums	15 603 253	37	0.0%
CON04	Outbuilding Condominiums Association FRAME BV BRICK	Commercial	42	Multi-Family Dwelling-Homeowners Association	306	Apartments/Condominiums	31 195 077	198	0.0%
CON06	Contents Condominiums Association Contents of (BLDGS & OUTBLDGS) FRAME BRICK OR HC	Commercial	42	Multi-Family Dwelling-Homeowners Association	306	Apartments/Condominiums	652 800	25	0.0%
CON08	Building Condominiums Association / Form 4 FRAME BV BRICK	Commercial	42	Multi-Family Dwelling-Homeowners Association	306	Apartments/Condominiums	13 653 317	12	0.0%
CON09	Contents Condominiums Association / Form 4 HC WR SWR	Commercial	42	Multi-Family Dwelling–Homeowners Association	306	Apartments/Condominiums	200 000	1	0.0%
CON13	HHG Condominiums residential HHG WR OR SWR	Residential	43	Multi-Family Dwelling–Condominium Unit Owner	306	Apartments/Condominiums	218 145 325	2 4 1 4	0.3%
CON14	HHG Condominiums residential HHG FRAME, BRICK OR HC	Residential	43	Multi-Family Dwelling-Condominium Unit Owner	306	Apartments/Condominiums	296,647,853	3,962	0.4%
D01	Building Dwelling residential WR, SWR, HC	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	7,119,028	12	0.0%
D02	Building Dwelling residential FRAME BV BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	55 091 952 265	169 319	83.1%
D06	HHG Dwelling residential HHG (Insured w thout building) FRAME BV BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	76 012 416	1 1 30	0.1%
D08	Ultra or and the second s	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	130 1/3 /8/	2 464	0.2%
D10	HIG/CONDUCTION DURING HIG FRAME BV DRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	209 149 744	40	0.0%
D12	Building / Duplex Buildex Building PrAville BV BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	308 148 744	1 3 10	0.0%
D16	HHG Duplex HHG (Insured without by Joing) EPAME BV BPICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	3 010 788	63	0.0%
D17	Rasthouse Attached Roathouse over water FRAME BV BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	1 631 125	104	0.0%
D18	Boathouse Detached Boathouse overwater FRAME BV BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	2 800 598	92	0.0%
F01	Building Farm & Ranch Dwelling	Residential Farm	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	65 670 888	155	0.1%
F02	HHG Farm & Ranch HHG	Residential Farm	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	390 000	3	0.0%
F03	Outbu lding Farm & Ranch Barns & Outbu ldings	Commercial Farm	20	Agriculture	373	Agriculture	4,915,172	50	0.0%
F04	Miscellaneous Miscellaneous Farm Property	Commercial Farm	20	Agriculture	373	Agriculture	110 000	10	0.0%
F05	Miscellaneous Class 1 Grain Tanks	Commercial Farm	20	Agriculture	373	Agriculture	4 630 000	36	0.0%
F18	Farm & Ranch Dwe ling - Outbuilding (Excluding "Barn" Type Structures) HC WR or SWR	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	1 429 250	15	0.0%
M1	Miscellaneous Commercial Structures	Commercial	37	General Commercial	311	General Commercial	32 297 699	291	0.0%
M1A	Miscellaneous Commercial Contents	Commercial	37	General Commercial	311	General Commercial	223 288	7	0.0%
M4	Miscellaneous Residential Structure	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	1 105 595	39	0.0%
M4B	Deck Dock of Pier Over Water Attached	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	798 400	53	0.0%
M4C	Deck Dock or Pier Over water stand Alone	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	2 511 507	00	0.0%
M4F	Miscellaneous Flag Pole	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	15 000	1	0.0%
M4H	Miscellaneous Swimming Pool (In-ground)	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	904 500	22	0.0%
M4 I	Miscellaneous Eence	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling, Single Family	130.000	8	0.0%
M5A	Flag Pole	Commercial	37	General Commercial	311	General Commercial	60 644	7	0.0%
M5B	Tennis court surface	Commercial	37	General Commercial	311	General Commercial	625 650	16	0.0%
M5D	Boathouse over water - stand alone	Commercial	37	General Commercial	311	General Commercial	1 981 104	10	0.0%
M5F	Stand alone deck/dock or pier over water	Commercial	37	General Commercial	311	General Commercial	2 214 976	27	0.0%
M5G	Attached Deck Dock or Pier (Over Water)	Commercial	37	General Commercial	311	General Commercial	25 000	1	0.0%
M5H	Canopy	Commercial	37	General Commercial	311	General Commercial	7 563 544	108	0.0%
M5J	Carport	Commercial	37	General Commercial	311	General Commercial	2 017 034	41	0.0%
M5K	Gazebo	Commercial	37	General Commercial	311	General Commercial	552 063	22	0.0%
M5L	Sign	Commercial	37	General Commercial	311	General Commercial	526 889	38	0.0%
M5M	lank	Commercial	37	General Commercial	311	General Commercial	24 848 497	118	0.0%
M5U	Swimming Pool (inground)	Commercial	3/	General Commercial	311	General Commercial	5 869 882	111	0.0%
M5P	Antenna/Satell te Disn	Commercial	3/	General Commercial	311	General Commercial	49 275	2	0.0%
MED	Light Bala	Commercial	37	Ceneral Commercial	311	General Commercial	3,466,538	118	0.0%
MSS	Score Board	Commercial	31	Entertainment and Recreation	317	Entertainment and Recreation	308 149	55	0.0%
M5T	Bleachare/Stadium	Commercial	10	Entertainment and Recreation	317	Entertainment and Recreation	125 000	3	0.0%
MH1	MH BUILDING COASTAL	Manufactured Home	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	40 595 112	732	0.0%
MH2	MH BUILDING BEACH	Manufactured Home	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	263 000	132	0.1%
MH3	MH CONTENTS COASTAL	Manufactured Home	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	159 000	8	0.0%
P02	Building Public Housing Project 1 & 2 Unit FRAME BV BRICK WITH PHC	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling Single Family	52 923 667	270	0.1%
P05	Building Public Housing Project 3 or more units Apartments WR SWR HC	Commercial	2	Permanent Dwelling Multi Fam ly	303	Permanent Dwelling Multi Family	41 258 389	4	0.1%
P06	Building Public Housing Project 3 or more unit Apartment FRAME BRICK HC	Commercial	2	Permanent Dwelling Multi Fam ly	303	Permanent Dwelling Multi Family	198 076 779	262	0.3%
P09	Building Public Housing Project Administrative Buldings WR SWR HC	Commercial	37	General Commercial	311	General Commercial	12 174 099	1	0.0%

CONF_CLASS_CD	CONF_CLASS_CD_SHORT_TEXT	Occupancy_Type as provided in Orig Data	RMS Occupancy Code as Modeled	RMS Occupancy Description	AIR Occupancy Code as Modeled	AIR Occupancy Description	τιν	Risk Count	6 of Total Value
P10	Building Public Housing iProject Administrative Buildings FRAME BV BRICK	Commercial	37	General Commercial	311	General Commercial	3,049,556	8	0.0%
T01	Building / Outbuilding Townhouse Association HC,WR,SWR	Commercial	42	Multi-Family Dwelling-Homeowners Association	303	Permanent Dwelling Multi Family	14,155,990	8	0.0%
T02	Building / Outbuilding Townhouse Association FRAME BV BRICK	Commercial	42	Multi-Family Dwelling-Homeowners Association	303	Permanent Dwelling Multi Family	177 940 964	247	0.3%
T05	Building Individually owned Townhouse WR SWR OR HC	Residential	43	Multi-Family Dwelling-Condominium Unit Owner	303	Permanent Dwelling Multi Family	981 691	1	0.0%
T06	Building Individually owned Townhouse FRAME BV OR BRICK	Residential	43	Multi-Family Dwelling–Condominium Unit Owner	303	Permanent Dwelling Multi Family	225 688 190	792	0.3%
T09	HHG Individually owned Townhouse (Insured without building) WR SWR OR HC	Residential	43	Multi-Family Dwelling-Condominium Unit Owner	303	Permanent Dwelling Multi Family	100 000	1	0.0%
T10	HHG Individually owned Townhouse (Insured without building) FRAME BV OR BRICK	Residential	43	Multi-Family Dwelling-Condominium Unit Owner	303	Permanent Dwelling Multi Family	57 376 120	658	0.1%
T12	Townhouse Association 1-2 Unit Frame BV Brick	Residential	42	Multi-Family Dwelling-Homeowners Association	303	Permanent Dwelling Multi Family	35 123 975	128	0.1%
T16	Townhome Outbuilding	Commercial	42	Multi-Family Dwelling-Homeowners Association	303	Permanent Dwelling Multi Family	1 687 634	5	0.0%
						Total	66.315.306.315	196,129	100.0%

Texas Windstorm Insurance Association

Data as of 11/30/2020

RMS Roof System, AIR Roof Cover, and AIR Roof Hail Impact Resistance (SevThun only)

Setting Wind Rated Shingles

WPI8 Data: Roof	WPI8 Data: Code	Location Data: MOD_BLDG_CREDIT	Location Data: Roof_Type	Location Data: WPI8_WAIVER_FL	Location Data: Year Built	RMS Roof System HU	RMS Roof System SCS	RMS Roof System Description	AIR Roof Cover	AIR Roof Cover Description
1	Contains IRC or IBC	N/A	Normal Shingle (see mapping)*	N	N/A	9	9	Shingle rated for high wind speeds	11	Hurricane Wind-Rated Roof Coverings
0	N/A	IRC or IBC	Normal Shingle (see mapping)*	N	> 2003	9	9	Shingle rated for high wind speeds	11	Hurricane Wind-Rated Roof Coverings

Override RMS Roof System for SCS and add AIR Roof Hail Impact Resistance for SevThun

Location Data: HAIL_RESISTANCE_ROOF_CD	RMS Roof System SCS	RMS Roof System Description SCS	AIR Roof Hail Impact Resistance SevThun	AIR Roof Hail Impact Resistance Description SevThun
1	12	U. L. Standard 2218 Class 1	1	Impact-resistant A
2	13	U. L. Standard 2218 Class 2	2	Impact-resistant B
3	14	U. L. Standard 2218 Class 3	3	Impact-resistant C
4	15	U. L. Standard 2218 Class 4	4	Impact-resistant D

Texas Windstorm Insurance Association

Data as of 11/30/2020

RMS Roof System, AIR Roof Cover, and AIR Roof Hail Impact Resistance (SevThun only)

Update All Other based on Mapping Bel	ow:					
Location Data: Roof Type	RMS Roof System HU	RMS Roof System Description HU	RMS Roof System SCS	RMS Roof System Description SCS	AIR Roof Cover	r AIR Roof Cover Description
ALUMINUMCORREXT	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
ALUMINUMPLAINEXT	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
ALUMINUMSHINGLEEXT	ALUMINUMSHINGLEEXT 2		2	Metal sheathing with concealed fasteners	4	Light Metal Panels
ALUMINUMSTANDINGSEAMEXT	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	8	Standing seam metal roofs
BUILTUPSMOOTHEXT	0 (since presence of gutters unknown)	Unknown	4 (hail driven w/ and w/out same credit for hail)	Built-up roof or single-ply membrane roof without the presence of gutters	9	Built-up roof without gravel
BUILTUPTARANDGRAVELEXT	0 (since presence of gutters unknown)	Unknown	4 (hail driven w/ and w/out same credit for hail)	Built-up roof or single-ply membrane roof without the presence of gutters	6	Built-up roof with gravel
copperBattenSeamExt	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
COPPEREXT	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
copperFlatSeamExt	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
copperStandingSeamExt	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	8	Standing seam metal roofs
FIBERGLASSTRANSLUCENTPANEXT	0	Unknown	0	Unknown	0	Unknown
FOAMEXT	0	Unknown	0	Unknown	0	Unknown
glassGreenhouseExt	0	Unknown	0	Unknown	0	Unknown
HAILPROOFEXT	0 (since presence of gutters unknown)	Unknown	4 (hail driven w/ and w/out same credit for hail)	Built-up roof or single-ply membrane roof without the presence of gutters	7	Single Ply membrane
METALSANDPANELSEXT	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
N/A	0	Unknown	0	Unknown	0	Unknown
NONEEXT	0	Unknown	0	Unknown	0	Unknown
PLEXIGLASSEXT	0	Unknown	0	Unknown	0	Unknown
ROLLEDEXT	0 (since presence of gutters unknown)	Unknown	4 (hail driven w/ and w/out same credit for hail)	Built-up roof or single-ply membrane roof without the presence of gutters	7	Single Ply membrane
RUBBEREXT	0 (since presence of gutters unknown)	Unknown	4 (hail driven w/ and w/out same credit for hail)	Built-up roof or single-ply membrane roof without the presence of gutters	7	Single Ply membrane
SHAKESVICTORIANSCALLEXT	6	Wood shakes	6	Wood shakes	2	Wooden Shingles
SHAKESWOODEXT	6	Wood shakes	6	Wood shakes	2	Wooden Shingles
shingleCementFiberExt	5	Concrete / clay tiles	5	Concrete / clay tiles	3	Clay/concrete tiles
SHINGLESARCHITECTURALEXT	7	Normal Shingle	7	Normal Shingle	1	Asphalt
SHINGLESASPHALTEXT	7	Normal Shingle	7	Normal Shingle	1	Asphalt
SHINGLESASPHALTFIBEREXT	7	Normal Shingle	7	Normal Shingle	1	Asphalt
shinglesAsphaltFiberglassIrrPattExt	7	Normal Shingle	7	Normal Shingle	1	Asphalt
SHINGLESFIBERGLASSEXT	7	Normal Shingle	7	Normal Shingle	1	Asphalt
SHINGLESPHOTOVOLTAICEXT	0	Unknown	0	Unknown	0	Unknown
SHINGLESPINEEXT	6	Wood shakes	6	Wood shakes	2	Wooden Shingles
SHINGLESSTEELAGGFINISHEXT	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
shinglesSteelExt	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
SHINGLESSYNTHETICRUBBEREXT	0 (since presence of gutters unknown)	Unknown	4 (hail driven w/ and w/out same credit for hail)	Built-up roof or single-ply membrane roof without the presence of gutters	7	Single Ply membrane
SHINGLESWOODEXT	6	Wood shakes	6	Wood shakes	2	Wooden Shingles
shinglesWoodFireResistantExt	6	Wood shakes	6	Wood shakes	2	Wooden Shingles
SINGLEPLYMEMBRANEEXT	0 (since presence of gutters unknown)	Unknown	4 (hail driven w/ and w/out same credit for hail)	Built-up roof or single-ply membrane roof without the presence of gutters	7	Single Ply membrane
SLATEEXT	5	Concrete/ clay tiles	5	Concrete/ clay tiles	5	Slate
slateReinforcedFiberCompositeExt	5	Concrete / clay tiles	5	Concrete / clay tiles	5	Slate
STEELEXT	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
STEELPORCELAINCOATEDEXT	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
STEELSTANDINGSEAMEXT	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	8	Standing seam metal roofs
terneFlatSeamExt	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
tileClayCustomColorsExt	5	Concrete / clay tiles	5	Concrete / clay tiles	3	Clay/concrete tiles
TILECLAYEXT	5	Concrete / clay tiles	5	Concrete / clay tiles	3	Clay/concrete tiles
tileClayGlazedExt	5	Concrete / clay tiles	5	Concrete / clay tiles	3	Clay/concrete tiles
TILECONCRETEEXT	5	Concrete / clay tiles	5	Concrete / clay tiles	3	Clay/concrete tiles
TILEMISSIONEXT	5	Concrete / clay tiles	5	Concrete / clay tiles	3	Clay/concrete tiles
TILESPANISHEXT	5	Concrete / clay tiles	5	Concrete / clay tiles	3	Clay/concrete tiles
TINEXT	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
tinLeadCoatedBattenSeamExt	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
tinLeadCoatedFlatSeamExt	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	4	Light Metal Panels
tinLeadCoatedStandingSeamExt	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	8	Standing seam metal roofs
VINYLEXT	0 (since presence of gutters unknown)	Unknown	4 (hail driven w/ and w/out same credit for hail)	Built-up roof or single-ply membrane roof without the presence of gutters	7	Single Ply membrane
zincStandingSeamPctExt	2	Metal sheathing with concealed fasteners	2	Metal sheathing with concealed fasteners	8	Standing seam metal roofs

Texas Windstorm Insurance Association

Data as of 11/30/2020

RMS Roof System, AIR Roof Cover, and AIR Roof Hail Impact Resistance (SevThun only) - TIV Summary

	RMS Roof System HU	RMS Roof System Description	TIV	Risk Count	% of Total Value
0		Unknown (includes built-up/single-ply)	5,049,158,635	8,451	7.6%
2		Metal sheathing with concealed fasteners	4,161,316,507	9,707	6.3%
5		Concrete / clay tiles	3,073,644,173	5,497	4.6%
6		Wood shakes	71,225,863	221	0.1%
7		Normal Shingle	35,728,296,347	122,661	53.9%
9		Shingle rated for high wind speeds (set using WPI8 Data criteria)	4,291,795,750	14,295	6.5%
9		Shingle rated for high wind speeds (set using Location Data criteria)	13,939,869,039	35,297	21.0%
		Total	66,315,306,315	196,129	100.0%

	RMS Roof System SCS	RMS Roof System Description	τιν	Risk Count	% of Total Value
0		Unknown	561,066,860	3,393	0.8%
2		Metal sheathing with concealed fasteners	4,087,692,093	9,568	6.2%
4		Built-up roof or single-ply membrane roof without he presence of gutters	4,475,154,156	5,031	6.7%
5		Concrete / clay tiles	3,068,423,809	5,486	4.6%
6		Wood shakes	71,225,863	221	0.1%
7		Normal Shingle	35,706,063,533	122,598	53.8%
9		Shingle rated for high wind speeds (set using WPI8 Data criteria)	4,286,584,764	14,286	6.5%
9		Shingle rated for high wind speeds (set using Location Data criteria)	13,929,981,258	35,271	21.0%
12		U. L. Standard 2218 Class 1	14,871,573	44	0.0%
13		U. L. Standard 2218 Class 2	1,760,933	7	0.0%
14		U. L. Standard 2218 Class 3	2,374,250	3	0.0%
15		U. L. Standard 2218 Class 4	110,107,223	221	0.2%
		Total	66,315,306,315	196,129	100.0%

	AIR Roof Cover	AIR Roof Cover Description	TIV	Risk Count	% of Total Value
0		Unknown	561,066,860	3,393	0.8%
1		Asphalt	35,728,296,347	122,661	53.9%
2		Wooden Shingles	71,225,863	221	0.1%
3		Clay/concrete tiles	2,445,452,839	3,453	3.7%
4		Light Metal Panels	3,407,990,719	7,851	5.1%
5		Slate	628,191,334	2,044	0.9%
6		Built-up roof with gravel	1,314,988,214	2,620	2.0%
7		Single Ply membrane	479,823,085	798	0.7%
8		Standing seam metal roofs	753,325,788	1,856	1.1%
9		Built-up roof without gravel	2,693,280,476	1,640	4.1%
11		Hurricane Wind-Rated Roof Coverings (set using WPI8 Data criteria)	4,291,795,750	14,295	6.5%
11		Hurricane Wind-Rated Roof Coverings (set using Location Data criteria)	13,939,869,039	35,297	21.0%
		Total	66,315,306,315	196,129	100.0%

AIR Roof Hail Impact SevThun	AIR Roof Hail Impact Resistant Description	TIV	Risk Count	% of Total Value
0	Unknown	66,186,192,335	195,854	99.8%
1	Impact-resistant A	14,871,573	44	0.0%
2	Impact-resistant B	1,760,933	7	0.0%
3	Impact-resistant C	2,374,250	3	0.0%
4	Impact-resistant D	110,107,223	221	0.2%
	Total	66,315,306,315	196,129	100.0%

exas Windstorm nsurance Association Data as of 11/30/2020 RMS Open ng otect on A R Window otect on A R Exte o Doos A R Wa Attached Stuctu es

w																				
	0		Contains IRC o BC	n and I	N A (assumed)	NA	NA	N	NA	4	All clazed open nos designed o plessule and a celmissiles (dools not designed o plessule impact)	3	Eng nee ed Shutte s	0	Unknown	0	Unknown	53 229 547	33	0 %
			Contains IRC o BC	n and I	N A (assumed)	NA	NA	N	NA	4	All clazed openings designed io ip essure and a germissiles (dools not designed on presure impact)	3	Enginee ed Shutte s	0	Unknown	0	Unknown	6 645 422	20	0.0%
	0		Contains IRC o BC	Seawa d	N A (assumed)	NA	NA	N	NA	4	All glazed openings designed o plessule and a gelmissiles (dools not designed o plessule impact)	3	Enginee ed Shutte s	0	Unknown	0	Unknown	94 58 794	23	0 %
			Contains IRC o BC	Seawa d	NA (assumed)	NA	NA	N	NA		All openings des gned o pressure and la ge missilies (including dog s)	3	Enginee ed Shutte s	3	Rein o ced single wid hidoo s	5	Rein o ced Double Doo Ga ages	8 709 906	26	0.0%
0	0		NA	NA	N A (assumed)	RC o IBC	Inland 2nd ent vo hs ed)	N	>= 2003	4	All clazed openings designed io ip essure and a germissiles (dools not designed io pressure impact)	3	Enginee ed Shutte s	0	Unknown	0	Unknown	9 435 409 92	24 574	4 2%
0	0		NA	NA	NA (assumed)	RC o IBC	Seawad (2nd ent yo hs eld)	N	>= 2003		All openings designed o pressure and la germissiles (including dools)	3	Eng nee ed Shutte s	3	Rein o ced single wid h doo s	5	Rein o ced Double Doo Ga ages	3 67 870 0 9	7 60	4.8%
0	0		NA	NA	N A (assumed)	RC o IBC	Retot (stentyothis ield)	N	>= 2003		All openings designed o pressure and la germissiles (including dools)	3	Enginee ed Shutte s	3	Rein o ced single wid hidoo s	5	Rein o ced Double Doo Ga ages	250 2 2		0.0%
All Othe s n	ot meeting an	v o abovecie a	a									0	Unknown	0	Unknown	0	Unknown	53 548 609 494	63 543	80.7%
																	Та		9 29	%

4 A followed es o coeriends includors and dos a la o si u la o dos ed at a minutars initiatat consinos and o maxet estatar whole vai s desired o la an maxie (b) Non-ditad dos s (in ordino as ace dos a) a ent desired o a sesso a and maxet Acard es o ASCE? The IS2 activity and to a a) and a significant and a significan

Texas Windstorm Insurance Association Data as of 11/30/2020

RMS Roof Age and AIR Roof Year Built

Run in this order

a) Set AIR Roof Year Built to max of "Roof_Yr" in Location data and "Certified date" year (when roof=1) in WPI8 data.

b) Set RMS Roof Age based on AIR Roof Year Built (0-5 years=1, 6-10 years=2, 11 years and older = 3)

c) Set RMS Roof Age to 4 (obvious signs of deterioration and distress) if the "Roof Condition" in the EV data is reported as "Damaged" or "Poor" unless the AIR Roof Year Bult is 2020 then leave as is.

- d) Apply above regardless of "WPI8_WAIVER_FL" in Location data (waiver only used if making logical assumptions based on IBC/IRC fields).
- e) For 3 risks with "Roof_yr" of 2021 and "Inception_Date" (in policy file) of 2020 the "Roof_Yr" was changed to 2020 (similar update made to YOC).

f) Set pre-1970 roofs to unknown for RMS Roof Age and AIR Roof Year Built. Only exceptions are if metal roof or "Roof Condition" in EV data is reported as "Damaged" or "Poor" then leave as reported for both models.

RMS Roof Age	Roof Age Description	TIV	Risk Count	% of Total Value
0	Unknown	1,897,943,517	8,697	2.9%
1	0-5 years	15,248,377,490	42,164	23.0%
2	6-10 years	11,582,139,393	32,315	17.5%
3	11 years and older	36,922,556,609	110,759	55.7%
4	obvious signs of deterioration & distress	664,289,306	2,194	1.0%
	Total	66,315,306,315	196,129	100.0%

AIR RoofYearBuilt		TIV	Risk Count	% of Total Value	
	0	1,898,434,837	8,708	2.86%	Difference in unknown compared to RMS is 11 of the unknowns fall in RMS
	1800	225,401	1	0.00%	
	1856	1,108,562	1	0.00%	
	1880	426,646	1	0.00%	
	1887	101,250	1	0.00%	
	1890	217,080	1	0.00%	
	1900	958,682	3	0.00%	
	1901	530,130	1	0.00%	
	1906	311,506	1	0.00%	
	1909	360,392	1	0.00%	
	1910	239,943	2	0.00%	
	1915	364,845	1	0.00%	
	1917	50,000	1	0.00%	
	1920	114,114	1	0.00%	
	1923	241,138	1	0.00%	
	1925	196,894	1	0.00%	
	1926	120,000	1	0.00%	
	1928	1,314,189	1	0.00%	
	1929	399,446	1	0.00%	
	1930	1,485,232	5	0.00%	
	1935	1,479,578	3	0.00%	
	1938	348,657	2	0.00%	
	1939	512,250	2	0.00%	
	1940	2,268,249	9	0.00%	
	1941	177,200	1	0.00%	
	1942	190,318	2	0.00%	
	1943	634,119	3	0.00%	
	1944	50,000	1	0.00%	
	1945	1,597,148	5	0.00%	
	1940	//1,15/	4	0.00%	
	1947	407,439	4	0.00%	
	1940	1,947,494	1	0.00%	
	1949	6 746 604	37	0.01%	
	1051	2 078 664	57	0.01%	
	1957	2,970,004	5	0.00%	
	1052	1 836 778	11	0.00%	
	1954	3 235 928	12	0.00%	
	1955	13.448.821	48	0.00%	
	1956	2,253,010	40	0.02%	
	1957	2,733,711	12	0.00%	
	1958	2,674,186	12	0.00%	
	1959	2,634.178	11	0.00%	
	1960	12,235,490	47	0.00%	
	1961	3,999,246	15	0.01%	
	1962	13,856,432	61	0.02%	
	1963	3,202,826	12	0.00%	
	1964	5,321,332	14	0.01%	
	1965	10,872,950	44	0.02%	
	1966	3,356,815	13	0.01%	
	1967	10,084,159	33	0.02%	
	1968	11,249,242	40	0.02%	
	1969	6,017,499	17	0.01%	
	1970	174,170,884	716	0.26%	
	1971	55,468,044	212	0.08%	
	1972	117,194,218	429	0.18%	
	1973	93,535,981	378	0.14%	
	1974	99,391,135	347	0.15%	
	1975	147,076,247	639	0.22%	
	1976	90,670,004	344	0.14%	
	1977	95,940,235	424	0.14%	

AIR RoofYearBuilt	TIV	Risk Count	% of Total Value
1978	276,569,455	998	0.42%
1979	133,083,393	550	0.20%
1980	227,299,808	1,076	0.34%
1981	131,692,735	540	0.20%
1982	190,578,369	802	0.29%
1983	232,545,045	989	0.35%
1984	251,895,052	1,009	0.38%
1985	270,265,827	1,050	0.41%
1986	191,375,603	716	0.29%
1987	292,846,235	861	0.44%
1988	110,099,639	355	0.17%
1989	140,294,533	395	0.21%
1990	257,371,523	591	0.39%
1991	206,603,117	591	0.31%
1992	309,564,925	912	0.47%
1993	422,142,948	1,217	0.64%
1994	430,447,956	1,281	0.65%
1995	474,190,936	1,696	0.72%
1996	567,846,374	1,855	0.86%
1997	700,227,360	2,333	1.06%
1998	1,024,695,351	3,090	1.55%
1999	1,170,588,784	3,384	1.77%
2000	1,183,227,878	3,694	1.78%
2001	1,320,041,214	3,839	1.99%
2002	1,963,463,290	5,854	2.96%
2003	2,288,452,686	6,833	3.45%
2004	2,333,264,412	6,773	3.52%
2005	3,072,593,181	9,174	4.63%
2006	3,727,146,685	11,437	5.62%
2007	2,544,268,892	7,280	3.84%
2008	4,145,545,045	11,052	6.25%
2009	5,778,596,648	16,111	8.71%
2010	2,124,529,184	6,121	3.20%
2011	2,325,279,709	6,905	3.51%
2012	2,253,303,201	6,398	3.40%
2013	2,993,825,931	7,939	4.51%
2014	1,985,479,593	5,213	2.99%
2015	2,804,448,404	8,202	4.23%
2016	2,311,504,264	0,853	3.49%
2017	3,437,400,784	9,329	5.18%
2018	1 060 305 163	10,230	5.57%
2019	1 120 805 166	4,020	2.97%
ZUZU	66 315 306 315	196 129	100 00%

Texas Windstorm Insurance Association

Data as of 11/30/2020

RMS Construction Quality, AIR Seal of Approval, and AIR Building Condition

For RMS Construction Quality and AIR Seal of Approval, only set if "WPI8 WAIVER FL"=N and if "MOD BLDG CREDIT" is either IRC/IBC/WRC (both in Location Data). Don't assume anything else on WRC (unless updated in WPI8 data).

MOD BLDG CD CREDIT CD	RMS Construction Quality	RMS Construction Quality Description	AIR Seal of Approval	AIR Seal of Approval Descripton	TIV	Risk Count	% of Total Value
	0	Unknown	0	Unknown	46,147,955,306	145,941	69 6%
IBC	9	Certified Design & Construction	1	Fully Engineered Structure	360,420,786	1,142	0 5%
IRC	9	Certified Design & Construction	1	Fully Engineered Structure	15,561,659,471	38,514	23 5%
WRC	9	Certified Design & Construction	1	Fully Engineered Structure	4,245,270,752	10,532	6.4%
				Total	66,315,306,315	196,129	100.0%

RMS Construction Quality Option 9: A permanent building designed by a certified professional engineer and inspected by a certified building inspector, thus implying that the building is designed to a level that exceeds minimum building codes AIR Seal of Approval Option 1: Designed by a Professional Engineer who is required by the local jurisdiction to seal the calculations and drawings.

For AIR Building Condition set based on the "STRUCTURE_CONDITION_CD" in Location Data.

Kivis übes not	nave building cond	tion code in model setting				
STRUCTURE	CONDITION CD	AIR BuildingCondition	AIR Building Condition Descriptoin	TIV	Risk Count	% of Total Value
N/A	0		Unknown	10,070,286,549	17,294	15.2%
Unknown	0		Unknown	3,169,505,518	13,760	4.8%
Average	1		Average	2,428,151,129	10,878	3.7%
Fair	1		Average	135,594,817	778	0.2%
Excellent	2		Good	9,639,319,614	24,667	14.5%
Good	2		Good	23,871,024,892	78,793	36.0%
VeryGood	2		Good	16,997,897,965	49,938	25.6%
Poor	3		Poor	3,525,832	21	0.0%
			Total	66,315,306,315	196,129	100.0%

Texas Windstorm Insurance Association Data as of 11/30/2020 RMS and AIR Roof Geometry

Set based on "Roof Style" in EV data.

Roof Style	RMS Roof Geometry	RMS Roof Geometry Description	AIR RoofGeometry	AIR Roof Gecomentry Description	TIV	Risk count	% of Total Value
Flat	2	Flat without parapets	1	Flat	1,561,530,214	3,904	2.4%
Gabled	5	Gable roof with slope less than or equal to 6:12 (26.5 degrees)	2	Gable end without bracing	12,657,253,597	46,606	19.1%
Hip	3	Hip roof with slope less than or equal to 6:12 (26.5 degrees)	3	Нір	12,380,868,584	37,057	18.7%
Mixed	0	Unknown	4	Complex	13,307,474,532	36,356	20.1%
Unknown	0	Unknown	0	Unknown	26,408,179,388	72,206	39 8%
				Total	66,315,306,315	196,129	100.0%

Texas Windstorm Insurance Association Data as of 11/30/2020 RMS Tree Density (SCS Only) and AIR Tree Exposure

Set based on "Tree Overhang" in EV data.

Tree Overhang	RMS TreeDensity SCS	RMS Tree Density Description SCS	AIR	R TreeExposure	AIR Tree Exposure Description	TIV	Risk Count	% of Total Value
None	0	Unknown	0		Unknown	19,739,896,161	56,870	29 8%
Unknown	0	Unknown	0		Unknown	26,437,106,739	72,268	39 9%
Low	2	Low Trees	2		Yes	17,254,267,996	56,189	26 0%
Medium	3	High Trees	2		Yes	2,860,316,349	10,706	4 3%
High	3	High Trees	2		Yes	23,719,070	96	0 0%
					Total	66,315,306,315	196,129	100.0%

Note: This was all done by Eagle view so looking if house obstructed by Trees not necessarily if nearby so code none as unknown.

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