

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) The hurricane model or models the Association relied on, including the model vendors, the model names, and the versions of each model;	<b>Model Vendor:</b> Risk Management Solutions, Inc. (RMS) <b>Model Name:</b> North Atlantic Hurricane Models <b>Model Version:</b> RMS RiskLink 18.1 Windstorm/Hurricane and Convective Storm (WS/CS)	<b>Model Vendor:</b> AIR Worldwide Corporation <b>Model Name:</b> AIR Hurricane Model for the United States <b>Model Version:</b> AIR Touchstone 8.0 Tropical Cyclone (TC) and AIR Touchstone 8.0 Severe Thunderstorm (ST)
§5.4160(d)(2) The in-force date and the total amount of direct exposures in force for the policy data used as the input for each hurricane model the association relied on;	<b>In-force Date:</b> 11/30/2020 <b>Direct Exposures:</b> Total Insured Values (TIV): \$66,315,306,314 Total Policy Limits: \$60,729,663,104 Risk Count: 196,129	<b>In-force Date:</b> 11/30/2020 <b>Direct Exposures:</b> Total Insured Values (TIV): \$66,315,306,314 Total Policy Limits: \$60,729,663,104 Risk Count: 196,129
§5.4160(d)(3) All user-selected hurricane model input assumptions used with each hurricane model the association relied on;	<b>Assumptions:</b> <ul style="list-style-type: none"> <li>- All Perils (Windstorm/Hurricane and Severe Convective Storms).</li> <li>- Aggregate Annual Loss estimate.</li> <li>- Windstorm/Hurricane frequency –RMS 2019 Stochastic (Near Term) Event Rates.</li> <li>- Severe Convective Storm frequency –RMS 2013 Stochastic (Near term) Event Rates.</li> <li>- With post-event loss amplification (PLA) (“Demand Surge”) for Windstorm /Hurricane. Severe Convective Storm excludes loss amplification (not available as an option in CS).</li> <li>- Without Storm Surge.</li> </ul> Exhibit A includes additional assumptions.	<b>Assumptions:</b> <ul style="list-style-type: none"> <li>- All Perils (Tropical Cyclone - Wind and Severe Thunderstorm).</li> <li>- Aggregate Annual Loss estimate.</li> <li>- Tropical Cyclone frequency - 10K US AP (2020) Warm Sea Surface Temperatures (WSST) frequency set.</li> <li>- Severe Thunderstorm frequency - 10K US AP (2020) – Standard.</li> <li>- With Demand Surge for Tropical Cyclone - Wind and Severe Thunderstorm.</li> <li>- Without Storm Surge.</li> </ul> Exhibit A includes additional assumptions
§5.4160(d)(4) The one-in-100-year probable maximum loss model output produced by each hurricane model the Association relied on;	<b>One-in-100-year PML:</b> \$2,714,658,698	<b>One-in-100-year PML:</b> \$4,295,784,474
§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;	<b>Blending methodology:</b> 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.	<b>Blending methodology:</b> 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.

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<p>§5.4160(d)(6)</p>	<p>Any adjustments the association or another party made to the one-in-100-year probable maximum loss model outputs or the blended or averaged output, including any adjustments to include loss adjustment expenses.</p>	<p><b>Adjustments:</b> The combined one-in-100-year aggregate loss estimate described in §5.4160(d)(5) was increased by a factor of 15% to account for estimated loss adjustment expenses to yield \$4,031,004,824. This amount was rounded to the nearest \$10 million to derive the one-in-100-year probable maximum loss for the catastrophe year 2021 of <b>\$4,030,000,000.</b></p>	<p><b>Adjustments:</b> The combined one-in-100-year aggregate loss estimate described in §5.4160(d)(5) was increased by a factor of 15% to account for estimated loss adjustment expenses to yield \$4,031,004,824. This amount was rounded to the nearest \$10 million to derive the one-in-100-year probable maximum loss for the catastrophe year 2021 of <b>\$4,030,000,000.</b></p>
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## 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 + Tomado
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
Financial Settings	Disaggregation: ON		
All Perils	Average Properties: Automatic		
	For Invalid Con/Occ Pairs: Use System Default		
	Apply location terms for residential contracts: 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
<b>Totals</b>					<b>\$60,729,663,104</b>	<b>196,129</b>

- Occupancy was reported and will be modeled as follows:

Occupancy Type	RMS Occupancy	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
<b>Totals</b>			<b>\$60,729,663,104</b>	<b>196,129</b>

- 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
<b>Total</b>	<b>\$60,729,663,104</b>	<b>196,129</b>

- 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" in PC data for occupancy if provides better detail and significant TV contribution. Otherwise use the "Occupancy\_Type" reported in Location data.

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	TIV	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 Family	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 Family	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 Family	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 Family	306	Apartments/Condominiums	208,597,579	287	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 Family	303	Permanent Dwelling: Multi Family	500,000	1	0.0%
A12	Outbuilding: Apartment house schedule FRAME, BV, BRICK	Commercial	2	Permanent Dwelling Multi Family	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 OR HC	Residential	2	Permanent Dwelling Multi Family	303	Permanent Dwelling: Multi Family	11,901,253	327	0.0%
A18	HHG: Apartment house residential (3 or more) WR, SWR	Residential	2	Permanent Dwelling Multi Family	303	Permanent Dwelling: Multi Family	242,440	7	0.0%
B01	18 Builders Risk Dwelling and F&R Dwelling original construction Form 18	Commercial	37	General Commercial	311	General Commercial	17,304,344	70	0.0%
B02	18 Builders Risk Dwelling and F&R Dwelling No additions or less than 10% Form 18	Commercial	37	General Commercial	311	General Commercial	386,244	6	0.0%
B03A	18 Builders Risk Dwelling and F&R Dwelling with additions and exceeding 10% Form 18 (BR)	Commercial	37	General Commercial	311	General Commercial	3,524,100	11	0.0%
B03B	Builders Risk Dwelling Repairs/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	688	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	3,489,385	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 Technical Schools	120,001,328	45	0.2%
CML04A	Building / Contents: BLANKET "PUBLIC" SCHOOLS HC, WR, SWR	Governmental	25	Education	345	Universities, Colleges and Technical Schools	823,002,616	55	1.2%
CML05	Contents: Commercial (all construction)	Commercial	37	General Commercial	311	General Commercial	243,614,776	1,402	0.2%
CML08	Building / Contents: BLANKET CHURCH	Commercial	22	Religion and NonProfit	341	Religion and Non-Profit	140,086,097	124	0.2%
CML09	Building / Contents: "PRIVATE" SCHOOL BLANKET COVERAGE	Commercial	25	Education	345	Universities, Colleges and Technical Schools	7,534,344	5	0.0%
CML10	HHG: RESIDENTIAL HHG IN COMMERCIAL BLDG	Residential	37	General Commercial	311	General Commercial	2,499,000	37	0.0%
CML11	Building: ROOMING & BOARDING HOUSES FRAME, BV, BRICK	Commercial	3	Temp Lodging	304	Temporary Lodging	20,584,548	36	0.0%
COM01	Building: Condominiums Association - HC, WR, SWR	Commercial	42	Multi-Family Dwelling - Homeowners Association	306	Apartments/Condominiums	1,462,579,238	231	2.2%
COM02	Building: Condominiums Association FRAME, BV, BRICK	Commercial	42	Multi-Family Dwelling - Homeowners Association	306	Apartments/Condominiums	803,000,161	801	1.2%
COM03	Outbuilding: Condominiums Association HC, WR, SWR	Commercial	42	Multi-Family Dwelling - Homeowners Association	306	Apartments/Condominiums	15,803,253	37	0.0%
COM04	Outbuilding: Condominiums Association FRAME, BV, BRICK	Commercial	42	Multi-Family Dwelling - Homeowners Association	306	Apartments/Condominiums	31,195,077	198	0.0%
COM06	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%
COM08	Building: Condominiums Association / Form 4 FRAME, BV, BRICK	Commercial	42	Multi-Family Dwelling - Homeowners Association	306	Apartments/Condominiums	13,653,317	12	0.0%
COM09	Contents: Condominiums Association / Form 4 HC, WR, SWR	Commercial	42	Multi-Family Dwelling - Homeowners Association	306	Apartments/Condominiums	200,000	1	0.0%
COM13	HHG: Condominiums residential HHG WR OR SWR	Residential	43	Multi-Family Dwelling - Condominium Unit Owner	306	Apartments/Condominiums	218,145,325	2,414	0.3%
COM14	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 without building) FRAME, BV, BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling: Single Family	76,012,416	1,130	0.1%
D08	Outbuilding: Dwelling residential Outbuildings FRAME, BV, BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling: Single Family	130,173,787	2,464	0.1%
D10	HHG / Contents: Outbuilding HHG FRAME, BV, BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling: Single Family	1,745,300	40	0.0%
D12	Building / Duplex: Duplex Building FRAME, BV, BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling: Single Family	308,148,744	1,316	0.5%
D15	HHG: Duplex HHG (insured without building) WR, SWR, HC	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling: Single Family	40,000	1	0.0%
D16	HHG: Duplex HHG (insured without building) FRAME, BV, BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling: Single Family	3,019,788	63	0.0%
D17	Boathouse: Attached Boathouse 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 over water FRAME, BV, BRICK	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling: Single Family	800,598	4	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	Outbuilding: Farm & Ranch Barns & Outbuildings	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 Dwelling - 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 or Pier Over Water Attached	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling: Single Family	799,400	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	88	0.0%
M4D	M4d	Residential	1	Permanent Dwelling Single Family	302	Permanent Dwelling: Single Family	2,000	1	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%
M4J	Miscellaneous: Fence	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%
M5I	Canopy	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	Tank	Commercial	37	General Commercial	311	General Commercial	24,848,497	118	0.0%
M5O	Swimming Pool (in-ground)	Commercial	37	General Commercial	311	General Commercial	5,869,882	111	0.0%
M5P	Antenna/Satellite Dish	Commercial	37	General Commercial	311	General Commercial	49,275	2	0.0%
M5Q	Fence	Commercial	37	General Commercial	311	General Commercial	3,466,538	118	0.0%
M5R	Light Pole	Commercial	37	General Commercial	311	General Commercial	308,149	55	0.0%
M5S	Score Board	Commercial	10	Entertainment and Recreation	317	Entertainment and Recreation	16,224	3	0.0%
M5T	Bleachers/Stadium	Commercial	10	Entertainment and Recreation	317	Entertainment and Recreation	125,000	2	0.0%
MH1	MH BUILDING - COASTAL	Manufactured Home	1	Permanent Dwelling Single Family	302	Permanent Dwelling: Single Family	40,595,112	732	0.1%
MH2	MH BUILDING - BEACH	Manufactured Home	1	Permanent Dwelling Single Family	302	Permanent Dwelling: Single Family	263,000	5	0.0%
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 Family	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 Family	303	Permanent Dwelling: Multi Family	198,076,779	262	0.3%
P09	Building: Public Housing Project Administrative Buildings 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	TIV	Risk Count	% of Total Value
P10	Building: Public Housing (Project Administrative Buildings - FRAME BV BRICK	Commercial	37	General Commercial	311	General Commercial	3,049,558	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%
						<b>Total</b>	<b>66,315,306,315</b>	<b>196,129</b>	<b>100.0%</b>

**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	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	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
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 Below:

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	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	2	Metal sheathing with concealed fasteners	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
BUILTUPSMOOTHXT	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
BUILTUPSTARANDGRAVEEXT	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
NONEXT	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
SHAKESVICTORIANS CALLEXT	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
shinglesAsphaltFiberglassIrPattExt	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
SLATEXT	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%
	<b>Total</b>	<b>66,315,306,315</b>	<b>196,129</b>	<b>100.0%</b>

RMS Roof System SCS	RMS Roof System Description	TIV	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 the 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%
	<b>Total</b>	<b>66,315,306,315</b>	<b>196,129</b>	<b>100.0%</b>

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%
	<b>Total</b>	<b>66,315,306,315</b>	<b>196,129</b>	<b>100.0%</b>

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%
	<b>Total</b>	<b>66,315,306,315</b>	<b>196,129</b>	<b>100.0%</b>

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

RMS Opening Protection, AIR Window Protection, AIR Exterior Doors, AIR Wall Attached Structures

Run in order shown																									
WPIB Data: Windows	WPIB Data: Doors	WPIB Data: Cnt	WPIB Data: Location	WPIB Data: Enginermnt	Location Data: MOD_BLDG_CREDIT	Location Data: TERRITORY	Location Data: WPIB_WAIVER_FL	Orig Date: Year Built	RMS Opening Protection	RMS Opening Protection Description	AIR Window Protection	AIR Window Protection Description	AIR Exterior Doors	AIR Exterior Doors Description	AIR Wall Attached Structures	AIR Wall Attached Structures Description	Tot	Stat Count	% of Total Value						
1	0	Contains IRC or IBC	Inward I	NA (assumed)	NA	NA	N	NA	4	All glazed openings designed for pressure and large missiles (doors not designed for pressure / impact)	3	Engineered Shutters	0	Unknown	0	Unknown	53,223,547	133	0.1%						
1	1	Contains IRC or IBC	Inward I	NA (assumed)	NA	NA	N	NA	4	All glazed openings designed for pressure and large missiles (doors not designed for pressure / impact)	3	Engineered Shutters	0	Unknown	0	Unknown	6,645,422	20	0.0%						
1	0	Contains IRC or IBC	Seaward	NA (assumed)	NA	NA	N	NA	4	All glazed openings designed for pressure and large missiles (doors not designed for pressure / impact)	3	Engineered Shutters	0	Unknown	0	Unknown	54,581,704	231	0.1%						
1	1	Contains IRC or IBC	Seaward	NA (assumed)	NA	NA	N	NA	1	All openings designed for pressure and large missiles (including doors)	3	Engineered Shutters	3	Reinforced single width doors	5	Reinforced Double Door Garages	8,700,906	26	0.0%						
0	0	NA	NA	NA (assumed)	IRC or IBC	NA	N	>= 2003	4	All glazed openings designed for pressure and large missiles (doors not designed for pressure / impact)	3	Engineered Shutters	0	Unknown	0	Unknown	9,436,405,921	24,514	14.2%						
0	0	NA	NA	NA (assumed)	IRC or IBC	Seaward (2nd entry of this field)	N	>= 2003	1	All openings designed for pressure and large missiles (including doors)	3	Engineered Shutters	3	Reinforced single width doors	5	Reinforced Double Door Garages	3,167,870,219	7,601	4.8%						
0	0	NA	NA	NA (assumed)	IRC or IBC	Retired (1st entry of this field)	N	>= 2003	1	All openings designed for pressure and large missiles (including doors)	3	Engineered Shutters	3	Reinforced single width doors	5	Reinforced Double Door Garages	255,212	1	0.0%						
All Others not meeting any of above criteria																	0	Unknown	0	Unknown	0	Unknown	53,548,869,484	183,543	80.7%
																	<b>Total</b>	<b>68,375,308,318</b>	<b>198,129</b>	<b>100.0%</b>					

RMS Opening Protection (Detail)

1 All exterior openings (glazed and non-glazed) are fully protected at a minimum with impact resistant coverings. Impact resistant doors (including garage doors) and/or impact resistant window units and meet the requirements for "Cyclic Pressure and Large Missile Impact" for large missiles - 9 lb. According to ASCE 7, the Florida Building Code (FBC), and the International Building Code (IBC), a building in wind-borne debris regions must have coverings within 30 feet of the ground meet the requirements of large missile impact tests (ASTM E 1996), and above 30 feet the opening must meet the requirements of small missile impact tests. Use this option for buildings taller than 30 feet that meet this requirement and have doors (including garage doors) designed for large missiles.

4 All glazed exterior openings (windows and doors) are fully protected at a minimum with impact resistant coverings and/or impact resistant window units designed for large missiles (9 lb). Non-glazed doors (including garage doors) are not designed for pressure and impact. According to ASCE 7, the FBC, and the IBC, a building in wind-borne debris regions must have openings within 30 feet of the ground meet the requirements of large missile impact tests (ASTM E 1996), and above 30 feet the openings must meet the requirements of small missile impact tests. Use this option for buildings taller than 30 feet that meet this requirement.

**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 WPIB 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 Built is 2020 then leave as is.
- d) Apply above regardless of "WPIB\_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%
<b>Total</b>		<b>66,315,306,315</b>	<b>196,129</b>	<b>100.0%</b>

AIR RoofYearBuilt	TIV	Risk Count	% of Total Value
0	1,898,434,837	8,708	2.86%
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%
1946	771,157	4	0.00%
1947	467,439	4	0.00%
1948	1,947,454	7	0.00%
1949	4,972,729	6	0.01%
1950	6,746,694	37	0.01%
1951	2,978,664	4	0.00%
1952	886,610	5	0.00%
1953	1,836,778	11	0.00%
1954	3,235,928	12	0.00%
1955	13,448,821	48	0.02%
1956	2,253,010	4	0.00%
1957	2,733,711	12	0.00%
1958	2,674,186	13	0.00%
1959	2,634,178	11	0.00%
1960	12,235,490	47	0.02%
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%

Difference in unknown compared to RMS is 11 of the unknowns fall in RMS Roof Age 4.

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	6,853	3.49%
2017	3,437,488,784	9,329	5.18%
2018	3,695,644,111	10,230	5.57%
2019	1,969,395,163	4,523	2.97%
2020	1,129,895,166	3,353	1.70%
<b>Total</b>	<b>66,315,306,315</b>	<b>196,129</b>	<b>100.00%</b>

**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 Description	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%
<b>Total</b>					<b>66,315,306,315</b>	<b>196,129</b>	<b>100.0%</b>

**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.

RMS does not have building condition code in model setting

STRUCTURE_CONDITION_CD	AIR_BuildingCondition	AIR Building Condition Description	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%
<b>Total</b>			<b>66,315,306,315</b>	<b>196,129</b>	<b>100.0%</b>

**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	Hip	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%
<b>Total</b>					<b>66,315,306,315</b>	<b>196,129</b>	<b>100.0%</b>

**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 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%
<b>Total</b>					<b>66,315,306,315</b>	<b>196,129</b>	<b>100.0%</b>

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