

Texas Windstorm Insurance Association 2023 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;	<p><b>Model Vendor:</b> Risk Management Solutions, Inc. (RMS)</p> <p><b>Model Name:</b> North Atlantic Windstorm Model</p> <p><b>Model Version:</b> RMS RiskLink 21.0 Windstorm/Hurricane and Convective Storm (WS/CS)</p>	<p><b>Model Vendor:</b> Verisk Corporation</p> <p><b>Model Name:</b> Verisk Tropical Cyclone Model for the United States</p> <p><b>Model Version:</b> Verisk Touchstone 9.0 Tropical Cyclone (TC) and Severe Thunderstorm (ST)</p>
§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;	<p><b>In-force Date:</b> 11/30/2022</p> <p><b>Direct Exposures:</b> Total Insured Values (TIV): \$89,935,082,473 Total Policy Limits: \$82,865,489,629 Risk Count: 231,121</p>	<p><b>In-force Date:</b> 11/30/2022</p> <p><b>Direct Exposures:</b> Total Insured Values (TIV): \$89,935,082,473 Total Policy Limits: \$82,865,489,629 Risk Count: 231,121</p>
§5.4160(d)(3) All user-selected hurricane model input assumptions used with each hurricane model the association relied on;	<p><b>Assumptions:</b></p> <ul style="list-style-type: none"> <li>- All Perils (Windstorm/Hurricane and Severe Convective Storms).</li> <li>- Aggregate Annual Loss estimate.</li> <li>- Windstorm frequency –RMS 2021 Historical (Long Term) Event Rates.</li> <li>- Severe Convective Storm frequency – RMS 2013 Stochastic Event Rates (High and Low frequency).</li> <li>- With post-event loss amplification (PLA) (“Demand Surge”) for Windstorm /Hurricane; Severe Convective Storm excludes loss amplification.</li> <li>- Without Storm Surge.</li> </ul>	<p><b>Assumptions:</b></p> <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) Standard (Std) event 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>
§5.4160(d)(4) The one-in-100-year probable maximum loss model output produced by each hurricane model the Association relied on;	<p><b>One-in-100-year PML:</b> \$3,920,262,069</p>	<p><b>One-in-100-year PML:</b> \$5,199,959,981</p>

<p>§5.4160(d)(5)</p>	<p>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;</p>	<p><b>Blending methodology:</b> The aggregate annual loss output from each of the two models described herein were combined using a weighting of 100% RMS to produce a combined one-in-100-year aggregate loss estimate of \$3,920,262,069 excluding any provision for estimated loss adjustment expenses.</p>	<p><b>Blending methodology:</b> The aggregate annual loss output from each of the two models described herein were combined using a weighting of 100% RMS to produce a combined one-in-100-year aggregate loss estimate of \$3,920,262,069 excluding any provision for estimated loss adjustment expenses.</p>
<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 \$4,508,301,380. This amount was rounded to the nearest \$1 million to derive the one-in-100-year probable maximum loss for the calendar year 2023 of <b>\$4,508,000,000.</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 \$4,508,301,380. This amount was rounded to the nearest \$1 million to derive the one-in-100-year probable maximum loss for the calendar year 2023 of <b>\$4,508,000,000.</b></p>

Texas Windstorm Insurance Association 2023 Catastrophe Year Disclosure to the Commissioner  
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Disclosure Requirement	Model #3	Model #4
§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;	<p><b>Model Vendor:</b> Impact Forecasting  <b>Model Name:</b> Atlantic Tropical Cyclone and Severe Convective Storm Models  <b>Model Version:</b> Impact Forecasting ELEMENTS 15.0 Atlantic Tropical Cyclone and Severe Convective Storm</p>	<p><b>Model Vendor:</b> CoreLogic  <b>Model Name:</b> CoreLogic North Atlantic Hurricane and Severe Convective Storm Models  <b>Model Version:</b> CoreLogic Risk Quantification &amp; Engineering (RQE) v21 North Atlantic Hurricane (HU) and Severe Convective Storm (SCS)</p>
§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;	<p><b>In-force Date:</b> 11/30/2022  <b>Direct Exposures:</b>  Total Insured Values (TIV): \$89,935,082,473  Total Policy Limits: \$82,865,489,629  Risk Count: 231,121</p>	<p><b>In-force Date:</b> 11/30/2022  <b>Direct Exposures:</b>  Total Insured Values (TIV): \$89,935,082,473  Total Policy Limits: \$82,865,489,629  Risk Count: 231,121</p>
§5.4160(d)(3) All user-selected hurricane model input assumptions used with each hurricane model the association relied on;	<p><b>Assumptions:</b></p> <ul style="list-style-type: none"> <li>- All Perils (Atlantic Tropical Cyclone - Wind and Severe Convective Storms).</li> <li>- Aggregate Annual Loss estimate.</li> <li>- Atlantic Tropical Cyclone v2.0 – Wind Only Historical (Long Term) Event Rates.</li> <li>- 48-State Severe Convective Storm v1.0 – All sub-perils.</li> <li>- With Demand Surge for Tropical Cyclone and Severe Convective Storm.</li> <li>- Without Storm Surge.</li> </ul>	<p><b>Assumptions:</b></p> <ul style="list-style-type: none"> <li>- All Perils (North Atlantic Hurricane and Severe Convective Storm).</li> <li>- Aggregate Annual Loss estimate.</li> <li>- North Atlantic Hurricane v21 – Wind Only 300k Historical (Long Term) Event Set.</li> <li>- Severe Thunderstorm frequency - Standard.</li> <li>- With Demand Surge for North Atlantic Hurricane and Severe Convective Storm.</li> <li>- Without Storm Surge.</li> </ul>
§5.4160(d)(4) The one-in-100-year probable maximum loss model output produced by each hurricane model the Association relied on;	<p><b>One-in-100-year PML:</b> \$4,170,936,990</p>	<p><b>One-in-100-year PML:</b> \$3,619,483,392</p>

<p>§5.4160(d)(5)</p>	<p>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;</p>	<p><b>Blending methodology:</b> The aggregate annual loss output from each of the two models described herein were combined using a weighting of 100% RMS to produce a combined one-in-100-year aggregate loss estimate of \$3,920,262,069 excluding any provision for estimated loss adjustment expenses.</p>	<p><b>Blending methodology:</b> The aggregate annual loss output from each of the two models described herein were combined using a weighting of 100% RMS to produce a combined one-in-100-year aggregate loss estimate of \$3,920,262,069 excluding any provision for estimated loss adjustment expenses.</p>
<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 \$4,508,301,380. This amount was rounded to the nearest \$1 million to derive the one-in-100-year probable maximum loss for the calendar year 2023 of <b>\$4,508,000,000.</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 \$4,508,301,380. This amount was rounded to the nearest \$1 million to derive the one-in-100-year probable maximum loss for the calendar year 2023 of <b>\$4,508,000,000.</b></p>

## 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	21.0	21.0	21.0
In-Force	11/30/2022	11/30/2022	11/30/2022
Peril	Windstorm/Hurricane	Windstorm/Hurricane	Convective Storm
Primary Peril	Wind	Wind	Tornado
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 2021 Stochastic Event Rates	RMS 2021 Historical Event Rates	RMS 2013 Stochastic Event Rates

#### Verisk settings

##### Modeling Parameters

Portfolio	Hurricane Near Term	Hurricane Long Term	Severe Convective Storm
Vendor	Verisk	Verisk	Verisk
Model	Touchstone	Touchstone	Touchstone
Version	9.0	9.0	9.0
In-Force	11/30/2022	11/30/2022	11/30/2022
Peril	Tropical Cyclone - Wind	Tropical Cyclone - Wind	Severe Thunderstorm
Sec Peril	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
Frequency	10K US AP (2020) - Warm SST	10K US AP (2020) - Standard	10K US AP (2021) - Standard
Financial Settings	Disaggregation: ON; Average Properties: Automatic; For Invalid Con/Occ Pairs: Use System Default;		
All Perils	Apply location terms for residential contracts: Deductibles before limits		

#### IF settings

##### Modeling Parameters

Portfolio	Hurricane Near Term	Hurricane Long Term	Severe Convective Storm
Vendor	Impact Forecasting	Impact Forecasting	Impact Forecasting
Model	ELEMENTS	ELEMENTS	ELEMENTS
Version	15.0	15.0	15.0
In-Force	11/30/2022	11/30/2022	11/30/2022
Peril	Atlantic Tropical Cyclone v2.0 - Wind	Atlantic Tropical Cyclone v2.0 - Wind	Severe Convective Storm
Sec Peril	None (excludes Storm Surge)	None (excludes Storm Surge)	All subperils
Country	United States	United States	United States
Currency	USD	USD	USD
PLA/DS	with Demand Surge	with Demand Surge	with Demand Surge
Vulnerability	Default	Default	Default
Frequency	Near-Term	Long-Term	48-State Severe Convective Storm v1.0

## CL settings

### Modeling Parameters

Portfolio	Hurricane Near Term	Hurricane Long Term	Severe Convective Storm
Vendor	CoreLogic	CoreLogic	CoreLogic
Model	Risk Quantification & Engineering (RQE)	Risk Quantification & Engineering (RQE)	Risk Quantification & Engineering (RQE)
Version	21.0	21.0	21.0
In-Force	11/30/2022	11/30/2022	11/30/2022
Peril	North Atlantic Hurricane - Wind	North Atlantic Hurricane - Wind	Severe Convective Storm
Sec Peril	None (excludes Storm Surge)	None (excludes Storm Surge)	All subperils
Country	United States	United States	United States
Currency	USD	USD	USD
PLA/DS	with Demand Surge	with Demand Surge	with Demand Surge
Frequency	Hurricane, North Atlantic - U.S. Mainland Landfalling/Bypassing - Near Term	Hurricane, North Atlantic - U.S. Mainland Landfalling/Bypassing	Severe Convective Storm, U.S. - Optimized

### General Information about exposure data for model inputs

- Data is current as of November 30, 2022.
- Each record in the data set represents one risk, defined as a single building and/or location.
- The data included 222,045 policies and 231,121 locations.
- The following process is taken for geocoding:
  1. Import/geocode in AIR.
  2. Convert to RMS and preserve user supplied lat/long include in the AIR import files.
  3. Geocode in RMS using the user supplied lat/long.
  4. Utilize geocoded county detail for reporting purposes.
- The perils of hurricane and tornado/hail will be modeled in RMS RiskLink v21.0, Verisk Touchstone v9.0, IF ELEMENTS v15.0, and CL RQE v21.0.
- 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 222,045 policies and 213,121 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 5,727 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	Site Limit	Risk Count	RMS Code	AIR Code	IF Code	CL Code
Asbestos/Stucco/Ceme	4,295,400	63	1	101	WD	TIM
Brick	2,442,678,370	6,523	2	111	MAS	MAS
Brick Veneer	20,238,160,528	55,525	1	103	WD	TIM
Brick/Stone/Veneer	23,875,650,280	57,646	2	111	MAS	MAS
Fire Resistive	4,445,000	2	3	131	RC	RC
Frame	29,834,444,469	95,847	1	101	WD	TIM
Frame (ISO 1)	1,803,431,500	3,352	1	101	WD	TIM
Frame or Brick Veneer	201,020,320	2,259	1	103	WD	TIM
Masonry	717,668,220	1,720	2	111	MAS	MAS
Masonry (ISO 2)	894,428,240	1,647	2	111	MAS	MAS
Metal	8,070,260	114	4	151	ST	STL
Not Applicable*	54,426,602	812	5B	194	MHT	MOB
Other	720,000	24	0	100	UNK	UNK
Pre-Engineered Metal (I	425,818,190	606	4B	152	LMB	LS
Protected Steel Frame (	39,420,605	22	4A4	153	ST	STL
Reinforced Concrete Fr.	99,895,120	62	4A1	155	ST	STL
Semi Wind Resistant	633,654,946	604	3C	182	RC	RC
Semi-Fire Resistive	1,800,000	2	4	151	ST	STL
Semi-Wind Resistive	17,215,440	144	3C	182	RC	RC
Solid Brick or Masonry	36,330,440	447	2	111	MAS	MAS
Solid Masonry	17,459,560	83	2	111	MAS	MAS
Steel Frame (ISO 4)	370,471,980	295	4B	152	LMB	TIM
Steel w/steel posts set	582,000	23	4	151	ST	STL
Unknown	26,120,000	306	0	100	UNK	UNK
Unknown Construction	34,046,900	548	0	100	UNK	UNK
Wind Resistant	1,009,915,159	1,677	3A	183	RC	RC
Wind Resistive	73,320,100	768	3A	183	RC	RC
<b>Total</b>	<b>82,865,489,629</b>	<b>231,121</b>				

• Occupancy was reported and will be modeled as follows:

Occupancy Type	Site Limit	Risk Count	RMS ATC Code	AIR Code	IF Code	CL Code
(Unknown)	55,281,640	667	0	300	U	RES
1 Family Residence	37,945,199,080	99,055	1	302	R	RES
2 Family Residence	194,534,860	729	2	303	R	RESAPT
Antenna / Satellite Dish	29,000	1	37	311	Com	COM
Apartment Building - 8+ Units on Premises and/or Business Personal Property	419,593,930	433	2	306	R	RESAPT
Apartment Building - Less than 8 Units on Premises and/or Business Personal Property	130,867,275	394	2	306	R	RESAPT
Apartment Outbuildings and/or Business Personal Property	23,394,060	57	2	306	R	RESAPT
Apartment/Condo	7,655,560	208	2	306	R	RESAPT
Boathouse (Over Water)	1,157,500	48	37	311	Com	COM
Boathouse (Over Water) and/or Business Personal Property	121,000	4	37	311	Com	COM
Canopy and/or Business Personal Property	10,667,780	100	37	311	Com	COM
Carport (Stand Alone)	1,879,000	71	37	311	Com	COM
Church (Structure and its Business Personal Property)	86,134,345	92	22	341	EdGovOrg	COMEDU
Cloth Awning	24,000	1	37	311	Com	COM
Commercial	353,805,821	642	2	303	R	RESAPT
Commercial	44,000	1	1	302	R	RES
Commercial	1,511,721,187	1,291	2	306	R	RESAPT
Commercial	2,435,375,082	5,030	37	311	Com	COM
Commercial	64,271,552	76	22	341	EdGovOrg	COMEDU
Commercial	4,621,255	2	25	346	EdGovOrg	MUNEDU
Commercial and F&R Non-Dwelling - New Construction	24,271,000	26	37	311	Com	COM
Commercial and F&R Non-Dwelling - Repairs and/or Improvements with No Additions	23,763,000	30	37	311	Com	COM
Commercial Building	726,400	14	37	311	Com	COM
Commercial Building and/or Business Personal Property	1,909,295,840	3,708	37	311	Com	COM
Commercial Farm	5,735,136	30	20	373	Agri	AGR
Commercially Rated Dwelling and/or Business Personal Property	43,933,665	126	37	311	Com	COM
Condominium	319,504,340	3,396	2	306	R	RESAPT
Condominium Association - Commercial and/or Business Personal Property	3,000,000	7	2	306	R	RESAPT
Condominium Association - Habitational and/or Business Personal Property	759,222,710	707	2	306	R	RESAPT
Condominium Association - Outbuildings and/or Business Personal Property	18,048,360	107	2	306	R	RESAPT
Deck Dock Pier or Wharf (Over Water)	4,281,300	56	37	311	Com	COM
Dwelling and F&R Dwelling - Additions (> 10% grade floor area)	4,014,000	13	1	302	R	RES
Dwelling and F&R Dwelling - New Construction	403,257,300	785	1	302	R	RES
Dwelling and F&R Dwelling - Repairs and/or Improvements with No Additions	36,429,800	139	1	302	R	RES
Dwelling Outbuilding	87,271,500	1,054	1	302	R	RES
Farm & Ranch Barn or Outbuilding and/or Business Personal Property	3,442,000	21	20	373	Agri	AGR
Farm & Ranch Grain Tank and/or Business Personal Property	2,345,000	32	20	373	Agri	AGR
Fence	2,922,000	76	37	311	Com	COM
Flood Lights/Light Pole	170,000	33	37	311	Com	COM
Gazebo	204,000	11	37	311	Com	COM
Governmental	217,530,020	89	25	346	EdGovOrg	MUNEDU
Individually Owned Townhomes	161,833,780	502	2	306	R	RESAPT
Manufactured Home	32,619,838	519	1	302	R	RES
Manufactured Home Personal Property Only	16,800,800	276	1	302	R	RES
Manufactured Home with the Option to Add Personal Property	14,607,800	202	1	302	R	RES
Miscellaneous Farm & Ranch Structure and/or Business Personal Property	20,000	3	20	373	Agri	AGR
Miscellaneous Items and/or Business Personal Property	4,999,000	87	37	311	Com	COM
Miscellaneous Structure Item	410,200	13	37	311	Com	COM
Public Housing 1 to 2 Units	22,536,800	90	2	303	R	RESAPT
Public Housing Authority Project and/or Business Personal Property	51,143,450	81	2	303	R	RESAPT
Public Housing Authority Project Outbuildings and/or Business Personal Property	5,888,000	6	2	303	R	RESAPT
Residential	338,147,990	3,712	2	306	R	RESAPT
Residential	438,197,379	2,177	2	303	R	RESAPT
Residential	34,453,649,477	103,634	1	302	R	RES
Residential	734,000	12	37	311	Com	COM
Residential Farm	33,578,816	77	1	302	R	RES
Rooming & Boarding House and/or Business Personal Property	883,000	6	2	303	R	RESAPT
School/Public (Structure and its Business Personal Property)	21,808,000	8	25	346	EdGovOrg	MUNEDU
Score Board	73,000	6	37	311	Com	COM
Sign	653,000	32	37	311	Com	COM
Swimming Pool (In Ground)	426,000	8	37	311	Com	COM
Swimming Pool (In-ground)	3,284,000	48	37	311	Com	COM
Tank and/or Business Personal Property	14,261,000	56	37	311	Com	COM
Tennis Court Surface	141,000	3	37	311	Com	COM
Townhome Association and/or Business Personal Property	131,536,000	189	37	311	Com	COM
Townhome Outbuildings and/or Business Personal Property	1,512,000	12	37	311	Com	COM
<b>Total</b>	<b>82,865,489,629</b>	<b>231,121</b>				



- The number of stories was reported and will be modeled if valid. There are 4,840 locations with no number of stories that will be modeled as unknown.
- Year built was reported and will be modeled if valid. There are 1,806 locations with no year built that will be modeled as unknown. Also, 1 location 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:

<b>Year Built</b>	<b>Site Limit</b>	<b>Risk Count</b>
Unknown	453,110,538	1,806
<= 1994	42,389,433,611	137,957
1995 - 2001	9,353,969,900	22,070
2002 - 2008	14,823,201,487	34,078
>= 2009	15,845,774,093	35,210
<b>Total</b>	<b>82,865,489,629</b>	<b>231,121</b>

- Square footage was reported and will be modeled if valid. 5,778 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.
- The following pages includes details regarding occupancy and secondary modifier updates.



Texas Windstorm Insurance Association

Data as of 11/30/2022

Roof Cover by Model and Peril and AIR Roof Hail Impact Resistance (SCS only)

AIR Roof Cover Description	AIR Code	Hurricane			Site Limit	Risk Count	% of Limit
		RMS Code	IF Code	CL Code			
Unknown/default	0	0	0	0	1,138,252,106	5,964	1.4%
Asphalt shingles	1	7	1	1	70,904,443,082	202,074	85.6%
Wooden shingles	2	6	0	9	112,633,623	332	0.1%
Clay/concrete tiles	3	5	2	10	2,240,686,770	3,910	2.7%
Light metal panels	4	2	3	8	4,676,444,363	10,581	5.6%
Slate	5	5	2	10	307,460,433	996	0.4%
Built-up roof with gravel	6	0	0	0	1,638,939,256	3,602	2.0%
ingle ply membrane	7	0	0	0	429,818,834	624	0.5%
Standing seam metal roofs	8	2	3	8	288,504,534	634	0.3%
Built-up roof without gravel	9	0	0	0	1,035,813,516	1,238	1.2%
Hurricane Wind-Rated Roof Coverings	11	9	3	2	92,493,110	1,166	0.1%
<b>Total</b>					<b>82,865,489,629</b>	<b>231,121</b>	<b>100.0%</b>

AIR Roof Cover Description	AIR Code	Severe Convective Storm			Site Limit	Risk Count	% of Limit
		RMS Code	IF Code	RQE Code			
Unknown/default	0	0	0	0	1,138,252,106	5,964	1.4%
Asphalt shingles	1	7	1	1	70,996,936,193	203,240	85.7%
Wooden shingles	2	6	0	9	112,633,623	332	0.1%
Clay/concrete tiles	3	5	2	10	2,240,686,770	3,910	2.7%
Light metal panels	4	2	3	8	4,676,444,363	10,581	5.6%
Slate	5	5	2	10	307,460,433	996	0.4%
Built-up roof with gravel	6	0	0	0	1,638,939,256	3,602	2.0%
ingle ply membrane	7	0	0	0	429,818,834	624	0.5%
Standing seam metal roofs	8	2	3	8	288,504,534	634	0.3%
Built-up roof without gravel	9	0	0	0	1,035,813,516	1,238	1.2%
<b>Total</b>					<b>82,865,489,629</b>	<b>231,121</b>	<b>100.0%</b>

AIR Roof Hail Impact Desc	AIR Code	Site Limit	Risk Count	% of Limit
Unknown	0	82,579,247,098	230,489	99.7%
Impact-resistant A	1	130,126,813	326	0.2%
Impact-resistant B	2	20,606,760	43	0.0%
Impact-resistant C	3	7,513,720	8	0.0%
Impact-resistant D	4	127,995,238	255	0.2%
<b>Total</b>		<b>82,865,489,629</b>	<b>231,121</b>	<b>100.0%</b>

Texas Windstorm Insurance Association

Data as of 11/30/2022

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

MOD_BLDG_CREDIT	TERRITORY	AIR Window Protection Description	AIR Open Protection Code	AIR Exterior Doors Description	AIR Exterior Doors Code	AIR Wall Attached Structure Description	AIR WallAttached Structure Code	RMS Opening Code	IF Window Code	CL Window Code	Site Limit	Risk Count	% of Limit
2018 IRC	Risk Category I	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	254,038,760	532	0.3%
2018 IRC	Risk Category II	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	776,264,660	1,684	0.9%
2018 IRC	Risk Category IV	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	12,504,440	18	0.0%
IBC	Inland1/Inland1	Engineered shutters	3 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	4	3	3	141,847,666	447	0.2%
IBC	Inland1/Seaward	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	2,209,000	6	0.0%
IBC	Inland2/Inland1	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	1,560,265	7	0.0%
IBC	Inland2/Inland2	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	50,432,766	130	0.1%
IBC	Inland2/Seaward	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	432,000	1	0.0%
IBC	Retrofit/Null	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	537,200	2	0.0%
IBC	Seaward/Seaward	Engineered shutters	3 Reinforced single width doors	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	5	4	3	3	30,862,339	85	0.0%
IRC	Inland1/Inland1	Engineered shutters	3 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	4	3	3	5,974,781,050	14,684	7.2%
IRC	Inland1/Inland1	Engineered shutters	3 Reinforced single width doors	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	5	4	3	3	249,000	1	0.0%
IRC	Inland1/Inland1	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	1,308,600	3	0.0%
IRC	Inland1/Seaward	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	73,256,069	174	0.1%
IRC	Inland2/Inland1	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	59,805,128	146	0.1%
IRC	Inland2/Inland2	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	1,958,135,777	4,239	2.4%
IRC	Inland2/Seaward	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	10,993,846	31	0.0%
IRC	Retrofit/Inland1	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	8,819,299	20	0.0%
IRC	Retrofit/Null	Engineered shutters	3 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	4	3	3	318,000	1	0.0%
IRC	Seaward/Seaward	Engineered shutters	3 Reinforced single width doors	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	5	4	3	3	2,187,587,705	4,525	2.5%
IRC	Seaward/Seaward	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	1,106,000	3	0.0%
IRC	Seaward/Seaward	Engineered shutters	3 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	4	3	3	4,251,000	9	0.0%
IRC/IBC	Inland I	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	591,200	1	0.0%
IRC/IBC	Inland I	Engineered shutters	3 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	4	3	3	7,410,563,660	16,256	8.9%
IRC/IBC	Inland II	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	2,646,357,100	5,247	3.2%
IRC/IBC	Retrofit	Engineered shutters	3 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	4	3	3	3,715,700	7	0.0%
IRC/IBC	Retrofit	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	24,185,080	53	0.0%
IRC/IBC	Seaward	Engineered shutters	3 Reinforced single width doors	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	5	4	3	3	1,940,730,020	3,792	2.3%
IRC/IBC	Seaward	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	1,025,800	2	0.0%
IRC2018	Missing short text: Inland.RiskCategoryI	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	850,400	5	0.0%
IRC2018	Missing short text: Inland.RiskCategoryII	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	119,854,732	390	0.1%
IRC2018	Missing short text: InlandI.RiskCategoryI	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	363,000	3	0.0%
IRC2018	Missing short text: InlandI.RiskCategoryII	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	44,490,037	125	0.1%
IRC2018	Missing short text: Seaward.RiskCategoryI	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	1,367,295	3	0.0%
IRC2018	Missing short text: Seaward.RiskCategoryII	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	51,781,596	95	0.1%
IRC2018	Missing short text: Seaward.RiskCategoryIV	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	841,215	2	0.0%
N/A	N/A	Engineered shutters	3 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	4	3	3	34,583,757	87	0.0%
N/A	N/A	Engineered shutters	3 Reinforced single width doors	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	5	4	3	3	61,070,267	124	0.1%
N/A	N/A	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	30,457,336,392	92,942	36.8%
Unknown	Inland I	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	177,534,440	392	0.2%
Unknown	Inland II	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	18,661,520	40	0.0%
Unknown	Retrofit	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	76,056,380	195	0.1%
Unknown	Risk Category I	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	1,137,000	3	0.0%
Unknown	Risk Category II	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	2,767,580	9	0.0%
Unknown	Risk Category IV	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	403,000	1	0.0%
Unknown	Seaward	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	22,907,400	49	0.0%
Unknown	Unknown	Engineered shutters	3 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	4	3	3	26,039,120	74	0.0%
Unknown	Unknown	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	21,213,726,200	68,126	25.6%
Unknown	Unknown	Engineered shutters	3 Reinforced single width doors	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	5	4	3	3	18,758,940	69	0.0%
WRC	Inland I	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	2,275,620,860	4,931	2.7%
WRC	Inland1/Inland1	Engineered shutters	3 Reinforced single width doors	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	5	4	3	3	564,800	2	0.0%
WRC	Inland1/Inland1	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	1,639,067,786	4,012	2.0%
WRC	Inland1/Inland1	Engineered shutters	3 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	4	3	3	4,797,400	8	0.0%
WRC	Inland1/Seaward	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	9,433,364	18	0.0%
WRC	Inland2/Inland1	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	321,712,557	684	0.4%
WRC	Inland2/Inland2	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	603,123	2	0.0%
WRC	Inland2/Seaward	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	2,871,500	9	0.0%
WRC	Retrofit	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	1,477,214,160	3,951	1.8%
WRC	Retrofit	Engineered shutters	3 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	4	3	3	1,007,400	3	0.0%
WRC	Retrofit	Engineered shutters	3 Reinforced single width doors	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	5	4	3	3	1,496,100	4	0.0%
WRC	Retrofit/Null	Engineered shutters	3 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	4	3	3	1,123,200	3	0.0%
WRC	Retrofit/Null	Engineered shutters	3 Reinforced single width doors	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	5	4	3	3	1,174,000	3	0.0%
WRC	Retrofit/Null	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	264,331,558	701	0.3%
WRC	Seaward	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	445,776,040	861	0.5%
WRC	Seaward/Seaward	Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	0	0	0	499,887,649	1,066	0.6%
WRC	Seaward/Seaward	Engineered shutters	3 Reinforced single width doors	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	3 Reinforced Double Door Garages	5	4	3	3	7,339,650	16	0.0%
WRC	Seaward/Seaward	Engineered shutters	3 Unknown/default	0 Unknown/default	0 Unknown/default	0 Unknown/default	0	4	3	3	2,467,080	7	0.0%
Total											82,865,489,629	231,121	100.0%

RMS Opening Protection (Detail)

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 openings 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.

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 small missile impact tests. Use this option for buildings taller than 30 feet that meet this requirement. Large missile impact tests (ASTM E 1996), and above 30 feet the opening must meet the requirements of small missile impact tests.

Texas Windstorm Insurance Association  
 Data as of 11/30/2022  
 Roof Age and Roof Year Built

Roof Year	AIR Code	RMS Code	IF Code	CL Code	Site Limit	Risk Count	% of Limit
2018 - 2022	2018- 2022	1	1	1	19,121,489,805	48,705	23.1%
2013 - 2017	2014 - 2017	2	2	2	15,139,265,375	40,813	18.3%
1800 - 2012	1800 - 2013	3	3	3	48,008,142,638	139,312	57.9%
Pre-2004 and Damaged/Poor Condition	Pre-2004	4	3	1*	149,563,761	592	0.2%
Unknown	Unknown	0	0	0	447,028,050	1,699	0.5%
<b>Total</b>					<b>82,865,489,629</b>	<b>231,121</b>	<b>100%</b>

Code Descriptions		
RMS	IF	CL
1: 0-5 yrs	1: 0-5 yrs	1: 0-5 yrs
2: 6-10 yrs	2: 6-10 yrs	2: 6-10 yrs
3: 11+ yrs	3:11+ yrs	3: 11-15 yrs
4: Obvious signs of deterioration		1*: Roof condition poor

Texas Windstorm Insurance Association

Data as of 11/30/2022

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

AIR Seal of Approval Description	AIR Code	RMS Code	Site Limit	Risk Count	% of Limit
Unknown/default	0	0	78,589,038,925	218,960	94.8%
Fully Engineered Structure	1	9	968,033,100	2,294	1.2%
Partially Engineered Structure	2	0	3,308,417,604	9,867	4.0%
<b>Total</b>			<b>82,865,489,629</b>	<b>231,121</b>	<b>100.0%</b>

**RMS**

Construction Quality

0: Unknown

9: Certified design & construction

0: Unknown

STRUCTURE_CONDITION_CD	AIR Building Condition Description	AIR Building Condition Code	Site Limit	Risk Count	% of Limit
N/A	Unknown/default	0	9,044,933,487	18,396	10.9%
Unknown	Unknown/default	0	1,534,991,014	7,496	1.9%
Excellent	Good	2	15,712,619,656	35,819	19.0%
Good	Good	2	29,383,659,863	92,305	35.5%
Very Good	Good	2	23,945,751,091	63,714	28.9%
Average	Average	1	3,093,848,386	12,546	3.7%
Fair	Average	1	145,789,770	822	0.2%
Poor	Poor	3	3,896,362	23	0.0%
<b>Total</b>			<b>82,865,489,629</b>	<b>231,121</b>	<b>100.0%</b>

Texas Windstorm Insurance Association

Data as of 11/30/2022

Roof Geometry

Set based on "Roof Style" in EV data.

Roof Style	AIR Code	RMS Code	IF Code	CL Code	Site Limit	Risk Count	% of Limit
0	0	0	0	0	47,465,547,925	125,970	57.3%
Flat	1	2	2	1	1,205,928,898	3,271	1.5%
Gabled	2	5	3	4	11,010,584,662	38,745	13.3%
Hip	3	3	1	7	10,818,067,522	31,105	13.1%
Mixed	4	5	3	4	12,365,360,623	32,030	14.9%
<b>Total</b>					<b>82,865,489,629</b>	<b>231,121</b>	<b>100.0%</b>

Texas Windstorm Insurance Association  
 Data as of 11/30/2022  
 AIR Tree Exposure

Set based on "Tree Overhang" in EV data.

Tree Overhang	AIR Tree Overhang Description	AIR Code	Site Limit	Risk Count	% of Limit
0	Unknown/default	0	47,485,888,593	126,014	57.3%
None	No	1	17,825,691,773	48,825	21.5%
High	Yes	2	20,114,049	82	0.0%
Low	Yes	2	15,290,193,475	47,983	18.5%
Medium	Yes	2	2,243,601,740	8,217	2.7%
<b>Total</b>			<b>82,865,489,629</b>	<b>231,121</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.