73. CAUSES OF LOSS – EARTHQUAKE FORM

A. Description Of Covered Causes Of Loss

This insurance provides coverage for loss by earthquake and volcanic eruption, explosion or effusion.

B. Forms

**1.** Use Earthquake And Volcanic Eruption Coverage With Percentage Deductible Endorsement CP 10 40 or Earthquake And Volcanic Eruption Coverage With Flat-dollar Deductible Endorsement CP 10 28**.**

These endorsements include an option for limiting coverage to "Earthquake – Sprinkler Leakage Only". The option is made applicable by appropriate entry in the Schedule or Declarations. Refer to Rule **74.F.** in the multistate and state sections of this manual for more information on this option.

(For information on writing Earthquake And Volcanic Eruption Coverage on a sub-limit basis, subject to an annual aggregate limit, refer to Rule **75.**)

**2.** Use Earthquake Inception Extension Endorsement CP 10 41 when simplified forms replace non-simplified forms and non-simplified forms include Earthquake Coverage.

C. Rules

1. Specific Insurance

**a.** The Limit of Insurance for Earthquake must be the same as the Limit of Insurance for other causes of loss.

**b.** For policies containing more than one item, Earthquake Coverage may apply to any or all items. Clearly identify in the Schedule or Declarations the items to which Earthquake Coverage applies.

2. Blanket Insurance

When Earthquake Coverage does not apply to all buildings or personal property included in a blanket item:

**a.** Designate in the Schedule or Declarations the specific building(s) or personal property to which the coverage applies.

**b.** Show the Earthquake Coverage Limit of Insurance for the designated building(s) or personal property item(s).

D. Rating Procedure

1. Risk Classification

Refer to Paragraph **D.4.** to obtain the building classification description. If after reference to Paragraph **D.4.** a building classification is not obtained, a classification may be determined as follows:

A request for determination of building classification may be submitted to ISO with a complete set of certified construction drawings, specifications and available soil report from the design professional and contractor indicating the design standards and the building construction inspection program to be utilized.

2. Deductibles

a. General Information

All rates for property damage coverage are based on a base deductible percentage. The base deductible percentages are shown in the state rates. Refer to Paragraph **D.2.d.** for information on higher percentage deductibles.

Percentage deductibles are accommodated under Endorsement CP 10 40**.**

(1) Specific Insurance

The dollar amount of the deductible will be equal to a percentage of the Limit(s) of Insurance applicable to the property that has sustained loss or damage.

(2) Blanket Insurance

The dollar amount of the deductible will be equal to a percentage of the value(s) of the property that has sustained loss or damage. The values to be used are those shown in the most recent Statement of Values on file with the company.

(3) Value Reporting Forms And Builders Risk Insurance

For value reporting forms, the calculation of the deductible amount is based on reported values. There are variations for the situation where loss occurs prior to the first report, and for reports of value which show less than full values. If coverage is written blanket under a reporting form, the basis of the calculation is value at time of loss.

For builders risk insurance, the calculation of the deductible amount is based on value at time of loss.

(4) Newly Acquired Or Constructed Property

When property is covered under the Coverage Extension for Newly Acquired or Constructed Property: In determining the amount, if any, that we will pay for loss or damage, we will deduct an amount equal to a percentage of the value(s) of the property at time of loss. The applicable percentage for Newly Acquired or Constructed Property is the highest percentage shown in the Declarations for any described premises.

b. Application

The deductible is calculated separately for, and applies separately to:

**(1)** Each building, if two or more buildings sustain loss or damage;

**(2)** The building and to personal property in that building, if both sustain loss or damage;

**(3)** Personal property at each building, if personal property at two or more buildings sustains loss or damage;

**(4)** Personal property in the open.

c. Statement Of Values

The Statement of Values for a blanket policy should contain sufficient detail – value of each building, value of personal property at each building, value of personal property in the open – to complement the procedure set forth in the endorsements.

d. Earthquake Deductible Options

Deductibles for building and personal property may be increased to a maximum of 40%, subject to application of credits. Multiply the rates at the base deductible by the appropriate factor as shown in Table 73.D.2.d. in the state exceptions. Refer to the State Rates for the applicable Deductible Tier.

Refer to Paragraph **D.2.f.** for Flat-dollar deductibles as an alternative to percentage deductibles.

e. Minimum Deductible – Steel Frame Of Building In Course Of Construction

Policies covering exclusively on the steel frame of a building, while in the course of construction, may have a minimum deductible of 2%. There is no rate modification factor for the 2% deductible.

f. Flat-dollar Deductibles

Flat-dollar deductibles are accommodated under Endorsement CP 10 28**.**

(1) Deductible Amounts

Deductibles range from $500 to $1,000,000. Rate modification factors at each deductible amount vary based on deductible tier, building class and total property value.

The total property value is the sum of the 100% values of the building and business personal property in that building and property in the open, if such coverages apply. (Exception: If the deductible is written to apply once per occurrence at a multi-building location, then the "total property value" look-up for **each** building at that location is the **combined** total property value of all buildings at the location, including business personal property in those buildings and property in the open if such coverages apply.

(2) Application Of Deductibles

In each occurrence of loss, the deductible applies separately to each location. If the Schedule shows a deductible for a particular building, then that building is considered to be a separate location with respect to application of the deductible.

(3) Flat-dollar Deductible Tables

Multiply the rates by the appropriate factor as shown in the tables for Rule **73.** in the section of this manual titled Earthquake Flat Deductible Rating.

3. Territory

Refer to the territory section for ZIP Code-based territory definitions to determine the territory applicable to the location of the property being insured.

4. Building Classification

In cases of mixed construction where two or more types of construction each represent 10% or more of the total area of the building, apply the class which produces the highest rate.

Building classifications are as follows (any building which fully qualifies under more than one definition should be placed in the lower numbered classification):

a. Completed Buildings

(1) Wood Frame Buildings

Class A1

Wood frame or frame stucco buildings. Excluded are structures which are classified for fire as wood frame but have concrete-supported floors and/or some walls of unit masonry or concrete.

(2) All-metal Buildings

Class B1

All-metal buildings. Wood or cement-asbestos are acceptable alternatives to metal roofing and/or siding.

(3) Steel Frame Buildings

Class C1

Buildings with a complete steel frame carrying all loads with floors and roofs of any material and with walls of any non-loadbearing materials.

(4) Reinforced Concrete Buildings, Combined Reinforced Concrete And Structural Steel Buildings

(a) Class D1

Buildings having all vertical loads carried by a structural system consisting of one or a combination of the following:

**(i)** Poured-in-place reinforced concrete frame.

**(ii)** Poured-in-place reinforced concrete interior and/or exterior walls.

**(iii)** Partial structural steel frame with Paragraph **D.4.a.(4)(a)(i)** and/or **D.4.a.(4)(a)(ii).**

Floors and roofs must be of poured-in-place reinforced concrete, except that materials other than reinforced concrete may be used for the roofs of buildings over three stories.

(b) Class D2

Buildings having a reinforced concrete frame or combined reinforced concrete and structural steel frame. Floors and roofs may be of any material, while exterior and interior walls may be of any non-loadbearing materials.

(c) Class D3

Buildings having:

**(i)** Partial or complete load-carrying system of precast concrete; and/or

**(ii)** Reinforced concrete lift-slab floors and/or roofs; and

**(iii)** Otherwise qualifying for Classes D1 and D2.

(5) Concrete Brick Or Block Buildings

(a) Class E1

Buildings having load-bearing exterior walls of:

**(i)** Reinforced brick masonry; and/or

**(ii)** Reinforced hollow concrete block masonry.

(b) Class E2

Buildings having load-bearing walls of unreinforced brick, other unreinforced solid unit masonry, hollow tile or other hollow unit masonry construction and cavity wall construction. Floors and roofs may be of any material.

(c) Class E3

Buildings having load-bearing walls of adobe. Also included are buildings not covered by any other class.

b. Buildings In Course Of Construction

All buildings and special structures in the course of construction must be placed in accordance with the appropriate completed building or structure class. With an exception for Earthquake construction classes C1, D1 and E1, to which the following factor is not applicable, multiply the applicable Earthquake Coverage building or special structure rates by a factor of 0.495.

c. Class 7 – Special Structures

Table **73.D.4.c.** provides a list of special structures not qualifying as buildings. If a particular special structure is not listed in Table **73.D.4.c.** under Items **1.** through **11.,** refer to Item **12.** Special structures will receive the rate for the equivalent building classification.

All rates for property damage coverage are based on a base deductible percentage. Refer to Paragraph **D.2.d.** for information on higher percentage deductibles. Refer to Paragraph **D.2.f.** for information on flat-dollar deductibles. (Percentage deductibles are accommodated under Endorsement CP 10 40**.** Flat-dollar deductibles are accommodated under Endorsement CP 10 28**.**)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Equivalent Building Class | Base Deductible | | Structure | | | | |
|  | E3 | 5 | % | **1.** | Bridges | | | |
|  | E3 | 5 |  | **2.** | Dams | | | |
|  | C1 | 5 |  | **3.** | Greenhouses or Cannabis Greenhouses with glass walls and roofs | | | |
|  | A1 | 5 |  | **4.** | Open-air swimming pools in excavations in the ground | | | |
|  |  |  |  | **5.** | Radio and TV towers (steel) | | | |
|  | C1 | 5 |  |  | **a.** | Not located on buildings | | |
|  | C1 | 5 |  |  | **b.** | Over 75 feet in height located on buildings | | |
|  |  |  |  |  | **c.** | Not over 75 feet in height located on buildings; **Note:** Building Class & Building Deductible Applies | | |
|  |  |  |  | **6.** | Reservoirs – See "Dams" | | | |
|  | C1 | 5 |  | **7.** | Sewage Treatment Plants | | | |
|  |  |  |  | **8.** | Silos – See "Tanks at Ground Level" | | | |
|  |  |  |  | **9.** | Stacks | | | |
|  | C1 | 5 |  |  | **a.** | Steel | | |
|  | C1 | 5 |  |  | **b.** | Reinforced concrete | | |
|  | E3 | 5 |  |  | **c.** | Brick | | |
|  |  |  |  | **10.** | Tanks | | | |
|  |  |  |  |  | **a.** | Tanks at ground level | | |
|  |  |  |  |  | | **(1)** | Steel and reinforced concrete tanks | |
|  | A1 | 5 |  |  | |  | **(a)** | Height-to-diameter ratio less than 1 |
|  | C1 | 5 |  |  | |  | **(b)** | Height-to-diameter ratio less than 1 to 2.5 |
|  | E2 | 5 |  |  | |  | **(c)** | Height-to-diameter ratio over 2.5 |
|  |  |  |  |  | | **(2)** | Wood tanks | |
|  | C1 | 5 |  |  | | | **(a)** | Height-to-diameter ratio less than 1 |
|  | E2 | 5 |  |  | | | **(b)** | Height-to-diameter ratio 1 and over |
|  |  |  |  |  | **b.** | Tanks on elevated towers | | |
|  | E2 | 5 |  |  | | **(1)** | Steel tank and tower | |
|  | E2 | 5 |  |  | | **(2)** | Reinforced concrete tank and tower | |
|  | E3 | 5 |  |  | | **(3)** | Wood tank and tower | |
|  | E3 | 5 |  |  | | **(4)** | Mixed construction | |
|  | A1 | 5 |  | **11.** | Transmission lines or tramway tower | | | |
|  | E3 | 5 |  | **12.** | Any structure not included above | | | |

Table 73.D.4.c. Class 7 – Special Structures

d. Masonry Veneer Limitation

The masonry veneer limitation of Endorsement CP 10 40 (which excludes loss to exterior masonry veneer on wood frame walls but includes stucco on wood frame walls) may be deleted by entering the words "Including Masonry Veneer" in the Premises Description in the Declarations. Multiply the Class A1 building rate by the appropriate factor from Table **73.D.4.d.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Percentage Of Total Exterior Wall Areas Faced With Masonry Veneer | | | Factor |
|  | 10% | – | 50% | 1.10 |
|  | Over 50% | | | 1.15 |

Table 73.D.4.d. Masonry Veneer Coverage Factors

Where less than 10% of the total outside wall area is faced with masonry veneer, the masonry veneer limitation (excluding stucco) is not applicable, nor does it apply to indirect loss coverage.

5. Personal Property Rate Grade

Use the following Personal Property Index to develop personal property costs:

a. Personal Property Grade 1

Exceptionally high susceptibility to damage by earthquake; for example:

* Manufacturing – Gas Manufacturers – Chemical
* Mercantile – Beverage Stores – Liquor and Wine

b. Personal Property Grade 2

High susceptibility to damage by earthquake; for example:

* Manufacturing – Aircraft or Aircraft Parts Manufacturers – Aircraft or Aircraft Parts
* Mercantile – Electronics Stores – Electronics

c. Personal Property Grade 3

Moderate susceptibility to damage by earthquake; for example:

* Manufacturing – Publishers – Books or Magazines
* Mercantile – Boat and Marine Supply Dealers – Boat and Marine

d. Personal Property Grade 4

Slight susceptibility to damage by earthquake; for example:

* Manufacturing – Cement or Plaster Manufacturers – Cement or Plaster
* Mercantile – Floor Covering Distributors – Carpets and Rugs

6. Coinsurance

a. Specific Insurance

Multiply the 80% coinsurance building or personal property rate by the following factors to convert the 80% rate to 90% or 100% coinsurance.

|  |  |  |
| --- | --- | --- |
|  | Percent Of Coinsurance | Factor |
|  | 90% | .95 |
|  | 100% | .90 |

Table 73.D.6.a. Coinsurance Modification Factors – Earthquake

b. Blanket And Multiple Location Average Rated Coverages

Refer to Rules **34.,** **35.** and **36.** for coinsurance rating procedures.

E. Premium Determination

1. Rate Calculations

a. Property Damage Coverages

**(1)** Select the appropriate building or personal property rate from the state rates based on the following applicable items:

**(a)** Deductible;

**(b)** Territory;

**(c)** Building classification;

**(d)** Personal property rate grade;

**(e)** Rating penalties (if applicable).

(2) Soft Story

Soft story refers to a particularly weak, flexible or otherwise vulnerable ground floor, most common in older, wood-frame, multi-story buildings. A soft story often features relatively large window and door openings and has fewer partitions (less bracing) than the overlying levels. Examples of structures with a soft story include an apartment building with storefronts on the ground floor or a house with the living space constructed over the garage. Excluded are buildings retrofitted or engineered to mitigate the seismic effects of soft story. Multiply building rate and personal property rate by the appropriate factor from Table **73.E.1.a.(2).**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Building | Personal Property |
|  | Soft-story Modification Factor | 1.42 | 1.28 |

Table 73.E.1.a.(2) Soft-story Modification Factors

b. Time Element

Calculate the Earthquake rate for time element coverage using the base rate and time element factors as specified in Rules **50.** and **52.,** except for buildings nine stories or over, multiply the Earthquake time element rate by the appropriate factor in Table **73.E.1.b.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Number Of Stories | | | Rate Factor |
|  | 1 | – | 8 | 1.0 |
|  | 9 | – | 20 | 1.0 |
|  | Over 20 | | | 1.0 |

Table 73.E.1.b. Story Modification Factors

Disregard the number of partial stories less than 15% of the ground floor area of the building. Also disregard basements. Where a story is more than 15 feet in height, consider each 15 feet (or greater fraction thereof) as equivalent to one story. In buildings with stories partially below grade level, such stories must be included in the story count for height where the story is accessible at grade level.

c. Leasehold Interest Coverage

Use the 80% coinsurance Earthquake building rate.

d. Rate Factors

Apply rate factors to the annual rates in the following order:

**(1)** Coinsurance adjustment;

**(2)** Factors or charges required by individual rules except as specified in Paragraph **E.1.d.(3)** or Paragraph **E.1.d.(4);**

**(3)** Municipal tax charges unless local requirements dictate otherwise; and

**(4)** Term or annual premium payment plan factor.

Apply additive factors before applying multiplicative factors except as otherwise specified in individual coverage rules.

2. Premium Calculation

Multiply the resulting rate by the Limit of Insurance in hundreds to determine the premium.

F. Territory Assignment

**1.** A new ZIP Code may be created by the United States Postal Service (USPS), which may not yet be listed in this manual. If this is the case, to determine the rating territory for a risk located in a new ZIP Code, use the ZIP Code that formerly applied to the risk before the ZIP Code boundaries were changed.

**2.** Future USPS ZIP Code changes will be reflected in ISO's territory assignments in accordance with the ISO ZIP Code Territory maintenance procedures on file with the Insurance Department. This manual will be updated on a regular basis to reflect future ZIP Code changes.

G. Building Code Enforcement

Refer to the Additional Rule titled Building Code Effectiveness Grading, in the state exceptions, for information which may affect Earthquake rating.

75. EARTHQUAKE AND VOLCANIC ERUPTION ENDORSEMENT (SUB-LIMIT FORM)

A. Description Of Coverage

This insurance provides coverage for loss by earthquake and volcanic eruption, explosion or effusion at a limit of insurance lower than the limit for other causes of loss, subject to an annual aggregate.

B. Forms

**1.** Use Earthquake And Volcanic Eruption Coverage (Sub-limit Form With Percentage Deductible) Endorsement CP 10 45 or Earthquake And Volcanic Eruption Coverage (Sub-limit Form With Flat-dollar Deductible) Endorsement CP 10 29**.**

**2.** Use Earthquake – Volcanic Eruption Coverage Schedule (Sub-limit Form) CP DS 06 with the aforementioned endorsements.

**3.** When coverage is written with a percentage deductible (Endorsement CP 10 45), use a Statement of Values except for Builders Risk non-reporting coverage. The amount of the percentage deductible is determined as a percentage of the stated value of property.

C. Rules

1. Coinsurance

The Coinsurance Condition does not apply to the coverage provided under Endorsement CP 10 45 or CP 10 29**.**

2. Specific And Blanket Insurance

**a.** For policies containing more than one item of covered property, Earthquake – Volcanic Eruption Coverage may apply to any or all items. Designate in the Schedule **(**CP DS 06**)** or in the Declarations the items to which Endorsement CP 10 45 or CP 10 29 applies.

**b.** Insurance under Endorsement CP 10 45 or CP 10 29 may be written on a specific or blanket basis. Enter the selected limit(s) of insurance in the Schedule **(**CP DS 06**)** or in the Declarations.

**c.** A single blanket limit may be written for all property, locations and coverages (e.g., property damage and time element) under a policy. Or, different blanket limits may be written for different groups of items, locations and coverages. For rating instruction on combining property damage coverage with time element coverage, refer to Paragraph **C.6.d.**

**d.** When Earthquake – Volcanic Eruption Coverage is written under a blanket limit(s), with other perils subject to specific limits, the specific limit is the maximum amount recoverable for an earthquake or volcanic eruption loss to the affected property or coverage.

3. Limits Of Insurance

**a.** The limit of insurance under Endorsements CP 10 45 and CP 10 29 is an annual aggregate limit, which applies to the total of all loss or damage that is caused by earthquake or volcanic eruption in a 12-month period (starting with the beginning of the present annual policy period), even if there is more than one earthquake or volcanic eruption during that period of time. If the first earthquake or volcanic eruption does not exhaust the limit of insurance, then the balance of that limit is available for a subsequent earthquake or volcanic eruption.

**b.** Endorsements CP 10 45 and CP 10 29 include an Increased Annual Aggregate Limit Option. Under this option, the annual aggregate is two times the limit of insurance; but the limit of insurance remains the maximum amount recoverable for a single earthquake or volcanic eruption. Indicate in the Schedule **(**CP DS 06**)** or in the Declarations whether the Increased Annual Aggregate Limit Option applies.

**c.** The limit of insurance stated for Earthquake – Volcanic Eruption is the maximum amount recoverable for loss or damage by earthquake or volcanic eruption. The Earthquake – Volcanic Eruption limit of insurance is **not** in addition to the limit of insurance that applies to other Covered Causes of Loss. For example, the maximum amount recoverable for the total of all loss or damage caused by an earthquake and fire resulting from the earthquake is the limit of insurance applicable to Fire.

**d.** Amounts payable under Additional Coverages and Coverage Extensions do not increase the Earthquake – Volcanic Eruption limit of insurance.

4. Deductibles

**a.** Under Endorsement CP 10 45**,** property damage coverage is subject to a percentage deductible which applies to the value of property that sustains damage by earthquake or volcanic eruption. The value to be used in determining the deductible amount is the value stated in the Statement of Values, or in the Report of Values for reporting form policies. For Builders Risk non-reporting policies, the relevant value is the actual cash value of the damaged property as of the time of loss.

**b.** For deductible percentages, refer to the tables under Paragraph **C.6.a.(5)** in the state exceptions. Enter the applicable deductible percentage(s) in the Schedule **(**CP DS 06**)** or in the Declarations.

**c.** Under Endorsement CP 10 29**,** property damage coverage is subject to a flat-dollar deductible. Enter the applicable flat-dollar deductible(s) in the Schedule **(**CP DS 06**)** or in the Declarations. In each occurrence of loss, the deductible applies separately to each location. If a deductible is shown for a particular building, then that building is considered to be a separate location with respect to application of the deductible.

Flat-dollar deductibles range from $500 to $1,000,000. Refer to the tables for Rule **75.** in the section of this manual titled Earthquake Flat Deductible Rating. The tables provide for selection of a single factor that adjusts for both the deductible and insurance-to-value (sub-limit) level. Select the table based on the deductible tier and amount of the deductible. Within that table, select the factor shown at the intersection of the applicable building class, "total property value" and "insurance-to-value level" (sub-limit), subject to the following:

**(1)** The "total property value" is the sum of the 100% values of the building and business personal property in that building and property in the open, if such coverages apply. (Exception: If the deductible is written to apply once per occurrence at a multi-building location, then the "total property value" look-up for **each** building at that location is the **combined** total property value of all buildings at the location, including business personal property in those buildings and property in the open if such coverages apply.

**(2)** To determine the "insurance-to-value level" (sub-limit), divide the actual limit of insurance by the 100% value of the insured property. For example, if a building has a value of $1 million and is being insured for $600,000, then the insurance-to-value level (sub-limit) is 60% ($600,000 ÷ $1,000,000 = .60).

5. Options

**a.** Refer to Paragraph **C.3.b.** of Rule **75.** for the Increased Annual Aggregate Limit Option.

**b.** Endorsement CP 10 45 may be used to limit coverage to "Earthquake – Sprinkler Leakage Only". This option is made applicable by appropriate entry in Schedule CP DS 06 or in the Declarations. Refer to Rule **74.F.**

**c.** The masonry veneer limitation in Endorsement CP 10 45 (which excludes loss to exterior masonry veneer but includes stucco on wood frame walls) may be deleted. Indicate in Schedule CP DS 06 or in the Declarations that the "Including Masonry Veneer" Option applies.

6. Rating

a. Rate Determination – Sub-limit Form

**(1)** Refer to Rule **73.D.1.** to obtain Earthquake Building Classification and Rule **73.D.5.** to obtain Personal Property Rate Grade.

**(2)** Refer to the territory section for ZIP Code-based definitions to determine the territory applicable to the location of the property being insured.

**(3)** Determine the deductible tier, which is specified for each territory in Rule **73.** in the state rates.

**(4)** Select Earthquake loss cost(s) for building and/or personal property from Rule **73.** in the state rates based on building classification, personal property rate grade if applicable, and territory.

**(5)** If coverage is written under Endorsement CP 10 45**,** refer to Table **75.C.6.a.(5)** in the state exceptions for sub-limit factors. The applicable table is determined by deductible tier. The appropriate factor is determined based on building classification, sub-limit percentage and deductible percentage.

For sub-limit percentages not shown in Table **75.C.6.a.(5),** interpolate using the factors for the nearest sub-limit percentages above and below the selected sub-limit percentage. Refer to the following example. Do not round until the final step of the interpolation procedure. The sub-limit factors shown in this example are for illustrative purposes only and are not necessarily the factors shown in the sub-limit factor tables of this manual.

**(a)** If the selected sub-limit percentage is 32%, the nearest sub-limit percentages for which factors are shown are percentages of 30% and 35%.

**(b)** Assume that for 30%, the sub-limit factor for deductible tier 2 at 5% deductible is 1.93 and for 35% the sub-limit factor for deductible tier 2 at 5% deductible is 1.77.

**(c)** Calculate the difference between the two factors.

1.93 – 1.77 = 0.16

**(d)** Calculate the difference between the selected sub-limit percentage (32%) and the lower percentage (30%) as decimals.

0.32 – 0.30 = 0.02

**(e)** Calculate the difference between the higher and lower sub-limit percentages as decimals.

0.35 – 0.30 = 0.05

**(f)** Multiply the result of Paragraph **C.6.a.(5)(c)** by the result of Paragraph **C.6.a.(5)(d)** and divide by the result of Paragraph **C.6.a.(5)(e).**

0.16 x 0.02 ÷ 0.05 = 0.064

**(g)** Subtract the result of Paragraph **C.6.a.(5)(f)** from the factor for the lower sub-limit percentage. Round the factor to three decimal places. The result is the sub-limit factor for a sub-limit percentage of 32%.

1.93 – 0.064 = 1.866 (rounded to 1.866)

**(6)** If coverage is written under Endorsement CP 10 29**,** refer to the tables for Rule **75.** in the section of this manual titled Earthquake Flat Deductible Rating. The applicable table is determined by deductible tier and the amount of the flat-dollar deductible. The appropriate factor is determined based on building class, insurance-to-value level (sub-limit) and total property value.

For sub-limit percentages not shown on the tables for Rule **75.,** interpolate using the procedure in Paragraph **75.C.6.a.(5).**

b. Rate Determination – Sub-limit Form – Property Damage Coverage

**(1)** Select the Earthquake building and/or personal property Earthquake Coverage loss cost.

**(2)** If the building is over three stories in height, multiply the result of Paragraph **C.6.b.(1)** (building and/or personal property rates) by the appropriate factor from Table **73.D.8.** in the state exceptions. The appropriate factor is determined based on building classification and territory group.

**(3)** If the building is sprinklered (meaning, there is an operable sprinkler system in any part of the building), multiply the result of Paragraph **C.6.b.(1)** or Paragraph **C.6.b.(2)** as applicable, by a factor of 1.06.

**(4)** If the Masonry Veneer Limitation of Endorsement CP 10 45 or CP 10 29 is deleted, multiply the **building** rate resulting from Paragraph **C.6.b.(1),** or Paragraph **C.6.b.(2)** or **C.6.b.(3)** as applicable, by the appropriate factor from Table **73.D.4.d.**

**(5)** If the building has a soft story, multiply the result from Paragraph **C.6.b.(1),** or Paragraph **C.6.b.(2), C.6.b.(3)** or **C.6.b.(4)** as applicable, by the appropriate factor from Table **73.E.1.a.(2).**

**(6)** To obtain the building and personal property rates for Earthquake And Volcanic Eruption Sub-limit Coverage, multiply the result from Paragraph **C.6.b.(1),** or Paragraphs **C.6.b.(2), C.6.b.(3),** **C.6.b.(4)** or **C.6.b.(5)** as applicable, by the appropriate deductible/sub-limit factor in accordance with the information in Paragraphs **C.6.a.(5)** and **C.6.a.(6).** The sub-limit percentage is the insurance-to-value ratio underlying the limit of insurance on the property.

c. Rate Determination – Sub-limit Form – Time Element Coverage

**(1)** Select the Earthquake **building** loss cost.

**(2)** Multiply the Earthquake building rate by the appropriate time element factor as specified in Rules **50.** and **52.**

Under Rule **50.,** select the time element factor for the coinsurance level that corresponds to the ratio of the Earthquake sub-limit to the estimated amount of annual business income. If this ratio is less than 50%, select the time element factor for no coinsurance.

**(3)** To obtain the time element rate for Earthquake And Volcanic Eruption Sub-limit Coverage, multiply the result of Paragraph **C.6.c.(2)** by .999. The .999 factor accounts for the reduction in protection inherent in the use of an annual aggregate limit.

d. Rate Determination – Sub-limit Form – Blanket Coverage For Property Damage And Time Element

**(1)** Determine the 100% values for both property damage and time element coverages. To obtain the 100% values for property damage coverage, use Statement Of Values Endorsement CP 16 15**.** For time element coverage, other than Extra Expense Only, use the annual net income as the 100% value. For Extra Expense Only Coverage, use the Extra Expense limit of insurance for other perils as the 100% value.

**(2)** Sum the 100% values for both property damage and time element coverages.

**(3)** Divide the blanket sub-limit by the result of Paragraph **C.6.d.(2)** to determine the sub-limit percentage.

**(4)** For each item written under the blanket sub-limit, use the result from Paragraph **C.6.d.(3),** the sub-limit percentage, to determine the sub-limit factor for that item. For property damage coverages, select the appropriate deductible/sub-limit factor in accordance with the information in Paragraphs **C.6.a.(5)** and **C.6.a.(6).** For time element coverages, select a factor from multistate Table **50.E.3.b.#1** or **50.E.3.b.#2.** Apply a factor of 1.0 when coverage is for Extra Expense Only.

**(5)** For each property damage item written under the blanket sub-limit, use the result from Paragraph **C.6.b.(1)** to Paragraph **C.6.b.(5),** as applicable. For time element items, use the result from Paragraph **C.6.c.(2).**

**(6)** For each item written under the blanket sub-limit, calculate the earthquake sub-limit rate by multiplying the earthquake sub-limit factor by the earthquake rate.

**(7)** For each item written under the blanket sub-limit, multiply the 100% value determined in Paragraph **C.6.d.(1)** by the earthquake sub-limit rate determined in Paragraph **C.6.d.(6).** Total the results of these calculations.

**(8)** Divide the total determined in Paragraph **C.6.d.(7)** by the result of Paragraph **C.6.d.(2)** to determine the earthquake sub-limit blanket average rate.

**(9)** Multiply the result of Paragraph **C.6.d.(8)** by the blanket sub-limit (in hundreds) to develop the blanket sub-limit premium.

For an example, see the Rating Examples Appendix.

e. Rating Of Increased Annual Aggregate Limit Option

Refer to rating procedures implemented by the company in compliance with regulatory requirements.