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Section 1

Introduction

1.0 Introduction

1.1 FTSE Nareit US Real Estate Index Series

1.1.1 The FTSE Nareit US Real Estate Index Series is designed to provide the most comprehensive assessment of overall industry performance, and includes all tax-qualified real estate investment trusts (REITs) that are listed on the New York Stock Exchange, or NASDAQ (See Appendix D).

To qualify as a REIT, a company must comply with certain provisions within the U.S. Internal Revenue Code. As required by the tax code, a REIT must:

- Be an entity that is taxable as a corporation
- Be managed by a board of directors or trustees
- Have shares that are fully transferable
- Have a minimum of 100 shareholders
- Have no more than 50 percent of its shares held by 5 or fewer individuals during the last half of the taxable year
- Invest at least 75 percent of its total assets in qualifying real estate assets, which include interests in real property, interests in mortgages on real property, or shares in other REITs
- Derive at least 75 percent of its gross income from real estate related services, such as rents from real property or interest on mortgages financing real property
- Have no more than 25 percent of its assets consist of stock in taxable REIT subsidiaries
- Pay annually at least 90 percent of its taxable income in the form of shareholder dividends
- For inclusion in the index series, a company must have US nationality as assigned by FTSE.

The FTSE Nationality Statement can be accessed using the following link: Determining_Nationality.pdf

1.1.2 Limited Liability Partnerships (LLP) and Limited Liability Companies (LLC) will not be eligible for inclusion.

1.1.3 Stapled Units consisting of a REIT common stock combined with a Non-REIT common stock will not be eligible for inclusion.
1.2 **FTSE Russell**


1.3 **IOSCO**

1.3.1 FTSE considers that the FTSE Nareit US Real Estate Index Series meets the IOSCO Principles for Financial Benchmarks as published in July 2013.

*Full details can be accessed at [www.iosco.org](http://www.iosco.org)*.

Details of FTSE Russell's Statement of Compliance with respect to the IOSCO Principles can be accessed using the following link:

[IOSCO Statement of Compliance](http://www.iosco.org).

1.4 FTSE Russell hereby notifies users of the index series that it is possible that circumstances, including external events beyond the control of FTSE Russell, may necessitate changes to, or the cessation, of the index series and therefore, any financial contracts or other financial instruments that reference the index series or investment funds which use the index series to measure their performance should be able to withstand, or otherwise address the possibility of changes to, or cessation of, the index series.

1.5 Index users who choose to follow this index series or to buy products that claim to follow this index series should assess the merits of the index series’ rules-based methodology and take independent investment advice before investing their own or client funds. No liability whether as a result of negligence or otherwise is accepted by FTSE Russell, Nareit or any members of the FTSE Nareit Index Series Advisory Committee (or any person concerned with the preparation or publication of these Ground Rules) for any losses, damages, claims and expenses suffered by any person as a result of:

- any reliance on these Ground Rules, and/or
- any errors or inaccuracies in these Ground Rules, and/or
- any non-application or misapplication of the policies or procedures described in these Ground Rules, and/or
- any errors or inaccuracies in the compilation of the Index or any constituent data.

1.6 **Ground Rules**

1.6.1 This document sets out the Ground Rules for the construction and maintenance of the FTSE Nareit US Real Estate Index Series. Copies of these Ground Rules are available from Nareit and FTSE (see Appendix C).

1.7 **Index Construction Methodology**

1.7.1 The FTSE Nareit US Real Estate Index Series consists of 7 headline indexes and a selection of property sector and sub-sector indexes.

The FTSE Nareit All REITs Index is a headline index that consists of all publicly traded REITs in accordance with Rule 1.1.1. The FTSE Nareit All REITs Index is not free float adjusted, and constituents are not required to meet minimum size, liquidity, UBTI screen or minimum voting right criteria.

The FTSE Nareit Composite Index is a headline index that consists of all REITs included in the FTSE Nareit All REITs Index that also meet minimum size and liquidity criteria. The FTSE Nareit Composite Index is free float adjusted (see Section 4.0).
The FTSE Nareit Real Estate 50 Index is a headline index that consists of the largest 50 eligible REITs from the FTSE Nareit Composite Index, ranked by market capitalization.

1.7.2 Constituents of the FTSE Nareit Composite Index are segregated into 4 additional headline Investment Sector Indexes – FTSE Nareit All Equity REITs Index, FTSE Nareit Equity REITs Index, FTSE Nareit RORI REITs Index and FTSE Nareit Mortgage REITs Index. Indexes also are calculated for separate property sectors and property sub-sectors (see Appendix B for further details).

1.7.3 The FTSE Nareit US Real Estate Index Series is calculated on an end-of-day basis in US dollars, Euro, UK Sterling and Japanese Yen.

1.7.4 Selected indexes are calculated and disseminated on a real time basis in US dollars.

1.7.5 Both price and total return indexes are calculated. Dividends are included in the total return indexes based on their ex-dividend dates.
Section 2

Management Responsibilities

2.0 Management Responsibilities

2.1 FTSE International Limited (FTSE)

2.1.1 FTSE is the benchmark administrator of the index series.¹

2.1.2 FTSE is responsible for the daily calculation, production and operation of the index series and will:

- maintain records of the index weightings of all constituents;
- make changes to the constituents and their weightings in accordance with the Ground Rules;
- carry out the periodic index reviews of the index series and apply the changes resulting from the reviews as required by the Ground Rules;
- publish changes to the constituent weightings resulting from their ongoing maintenance and the periodic reviews;
- disseminate the indexes.

2.2 FTSE Nareit Index Series Advisory Committee

2.2.1 The FTSE Nareit Index Series Advisory Committee, whose membership is representative of, but not limited to, users of the FTSE Nareit US Real Estate Index Series, is established by FTSE and Nareit as an independent advisory committee.

2.2.2 The FTSE Nareit Index Series Advisory Committee provides guidance to FTSE and Nareit on necessary changes or updates to the Ground Rules for the FTSE Nareit US Real Estate Index Series.

2.2.3 The FTSE Nareit Index Series Advisory Committee ensures that a consistent approach is applied to the selection of constituents and the application of corporate events.

2.2.4 The FTSE Nareit Index Series Advisory Committee meets quarterly, in March, June, September and December or more frequently, if required.

¹ The term administrator is used in this document in the same sense as it is defined in Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds (the European Benchmark Regulation).
2.3 **Amendments to these Ground Rules**

2.3.1 These Ground Rules shall be subject to regular review by FTSE Russell to ensure that they continue to best reflect the aims of the index series. Any proposals for significant amendments to these Ground Rules will be subject to consultation with FTSE Russell advisory committees and other stakeholders if appropriate. The feedback from these consultations will be considered by the FTSE Russell Product Governance Board before approval is granted.

2.3.2 As provided for in the Statement of Principles for FTSE Russell Equity Indexes, where FTSE Russell determines that the Ground Rules are silent or do not specifically and unambiguously apply to the subject matter of any decision, any decision shall be based as far as practical on the Statement of Principles. After making any such determination, FTSE Russell shall advise the market of its decision at the earliest opportunity. Any such treatment will not be considered as an exception or change to the Ground Rules, or to set a precedent for future action, but FTSE Russell will consider whether the Ground Rules should subsequently be updated to provide greater clarity.
Section 3

FTSE Russell Index Policies

3.0 FTSE Russell Index Policies

These Ground Rules should be read in conjunction with the following policy documents which can be accessed using the links below:

3.1 Corporate Actions and Events Guide

3.1.1 Full details of changes to constituent companies due to corporate actions and events can be accessed in the Corporate Actions and Events Guide using the following link:

Corporate_Actions_and_Events_Guide.pdf

3.2 Statement of Principles for FTSE Russell Equity Indexes (the Statement of Principles)

Indexes need to keep abreast of changing markets and the Ground Rules cannot anticipate every eventuality. Where the Rules do not fully cover a specific event or development, FTSE Russell will determine the appropriate treatment by reference to the Statement of Principles which summarises the ethos underlying FTSE Russell's approach to index construction. The Statement of Principles is reviewed annually and any changes proposed by FTSE are presented to the FTSE Russell Policy Advisory Board for discussion before approval by the FTSE Russell Product Governance Board.

The Statement of Principles can be accessed using the following link:


3.3 Queries, Complaints and Appeals

3.3.1 A constituent or prospective constituent company (or professional advisor acting on behalf of the company), a national organisation or a group of no fewer than ten users of the Indexes from different organisations acting in their professional capacity may appeal against decisions taken by FTSE Russell.

FTSE Russell's complaints procedure can be accessed using the following link:

Benchmark_Determination_Complaints_Handling_Policy.pdf

FTSE Russell's Appeal Process can be accessed using the following link:

 Appeals_Against_Decisions.pdf

3.4 **Index Policy for Trading Halts and Market Closures**

3.4.1 Guidance for the treatment of index changes in the event of trading halts or market closures can be found using the following link:

[Index_Policy_for_Trading_Halts_and_Market_Closures.pdf](Index_Policy_for_Trading_Halts_and_Market_Closures.pdf)

3.5 **Index Policy in the Event Clients are Unable to Trade a Market**

3.5.1 Details of FTSE Russell’s treatment can be accessed using the following link:

[Index_Policy_in_the_Event_Clients_are_Unable_to_Trade_a_Market.pdf](Index_Policy_in_the_Event_Clients_are_Unable_to_Trade_a_Market.pdf)

3.6 **Recalculation Policy and Guidelines**

3.6.1 The FTSE Nareit US Real Estate Index Series is recalculated whenever errors or distortions occur that are deemed to be significant. Users of the index series are notified through appropriate media.

For further information refer to the FTSE Russell Recalculation Policy and Guidelines document which is available from the FTSE Russell website using the link below or by contacting info@ftserussell.com.

[Recalculation_Policy_and_Guidelines_Equity_Indexes.pdf](Recalculation_Policy_and_Guidelines_Equity_Indexes.pdf)

3.7 **Policy for Benchmark Methodology Changes**

3.7.1 Details of FTSE Russell’s policy for making benchmark methodology changes can be accessed using the following link:

[Policy_for_Benchmark_Methodology_Changes.pdf](Policy_for_Benchmark_Methodology_Changes.pdf)
Section 4

Algorithm and Calculation Methodology

4.0 Algorithm and Calculation Methodology

4.1 The FTSE Nareit US Real Estate Index Series is calculated using the following formula:

\[
\sum_{i=1}^{n} \left( \frac{p_i \times s_i \times f_i}{d} \right)
\]

Where,

- \(i=1,2,...,N\)
- \(N\) is the number of securities in the index.
- \(p_i\) is the latest trade price of the component security.
- \(s_i\) is the number of shares in issue used by FTSE Russell for the security, as defined in these Ground Rules.
- \(f_i\) is the Investability Weighting Factor to be applied to a security to allow amendments to its weighting, expressed as a number between 0 and 1, where 1 represents a 100% free float. This factor is published by FTSE Russell for each security in the underlying index.
- \(d\) is the divisor, a figure that represents the total issued share Capital of the Index at the base date. The divisor can be adjusted to allow changes in the issued share Capital of individual securities to be made without distorting the index.

4.1.1 Adjustments to the divisor are applied whenever capital changes take place so that the performance of the FTSE Nareit US Real Estate Index Series reflects the experience of investors. The FTSE Global Equity Index Series Guide to Calculation – available from FTSE Russell – contains descriptions of the statistical procedures and algorithms used in the compilation of the index series.

4.1.2 The FTSE Nareit US Real Estate Index Series is also calculated in currencies other than the US dollar. For these calculations, the following formula is used:

\[
\sum_{i=1}^{n} \left( \frac{p_i \times s_i \times f_i \times e_{t-1}}{d} \right)
\]
Where,

- $e_{t-1}$ is the previous day's exchange rate between the US dollar and the desired calculation currency.

A list of standard non-US dollar calculations is provided in Appendix E.
Section 5

Qualification Criteria and Periodic Review of Constituents

5.0 Qualification Criteria and Periodic Review of Constituents

5.1 Review Date

5.1.1 The FTSE Nareit US Real Estate Index Series is reviewed on an annual basis in December for all companies which meet the criteria for eligible securities set out in these Ground Rules, based on data as at the close of business on the Monday 4 weeks prior to the effective date. Any constituent changes will be implemented at the close of business on the third Friday of December.

5.1.2 The FTSE Nareit US Real Estate Index Series is also reviewed on a quarterly basis in March, June and September for newly listed IPOs or REIT conversions which do not qualify for fast entry, but which meet the criteria for eligible securities set out in these Ground Rules. The review is based on data at the close of business on the Monday 4 weeks prior to the review effective date.

5.1.3 The index review is published after US market close on the Tuesday before the first Friday of March, June September and December.

5.1.4 Any constituent changes resulting from the periodic review will be implemented at the close of business on the third Friday (i.e. effective Monday) of March, June, September and December. Subsequent adjustments in stock weightings (including free float) will become effective at the same time.

5.2 Responsibilities and Reporting

5.2.1 FTSE Russell will be responsible for conducting the quarterly reviews of constituents for the FTSE Nareit US Real Estate Index Series. For each index, all eligible companies will be ranked by full market capitalization, before the application of any free float adjustments, as at the close of business on the Monday 4 weeks prior to the review effective date.

5.3 Review Process

5.3.1 The rules for adding and deleting securities at the quarterly review are designed to provide stability in the selection of constituents of the FTSE Nareit US Real Estate Index Series while ensuring that the indexes continue to be representative of the market by including or excluding those securities which have risen or fallen significantly in value.

5.3.2 All companies that satisfy Rule 1.1.1 are eligible for the FTSE Nareit All REITs Index.
The constituents of the FTSE Nareit All REITs Index will then be subject to the five screens detailed below in order to identify the eligible constituents for the FTSE Nareit Composite Index and the FTSE Nareit Real Estate 50 Index.

### Screen One – Size

Only companies with a full market capitalization greater than $100 million (on the date at which the data for the review are taken) will be included in the index.

### Screen Two - Liquidity

Each security will be tested for liquidity on an annual basis in December by calculation of its monthly median daily trading volume.

Liquidity will be calculated from the first business day in December of the previous year to the review data cut-off date in November. When calculating the median of daily trades per month of any security, a minimum of 5 trading days in that month must exist, otherwise the month will be excluded from the test.

For each month, the daily trading volume for each security is calculated as a percentage of the shares in issue for that day adjusted by the free float at the review cut off date. These daily values are then ranked in descending order and the median is taken by selecting the value for the middle ranking day if there is an odd number of days and the mean of the middle two if there is an even number of days.

Daily totals with zero trades are included in the ranking, therefore a security that fails to trade for more than half of the days in a month will have a zero median trading volume for that month.

Any period of suspension will not be included in the test.

The liquidity test will be applied on a pro-rata basis where the testing period is less than 12 months.

A. A non-constituent which does not turnover at least 0.05% of its shares in issue (after the application of any free float weightings) based on its median daily trading volume per month for at least ten of the twelve months prior to a full market review will not be eligible for inclusion in the index series.

B. An existing constituent which does not turnover at least 0.04% of its shares in issue (after the application of any free float weightings) based on its median daily trading volume per month for at least eight of the twelve months prior to a full market review will be removed.

C. New issues which do not qualify as entrants as defined in Rule 6.2.1 will become eligible for inclusion at the next quarterly review providing they trade a minimum of 20 days. They must turnover at least 0.05% of their shares in issue (after the application of any free float weightings*) based on their median daily trading volume each month, on a pro-rata basis since listing.

*When testing liquidity the free float weight as at the last date in the testing period will be used for the calculation for the whole of that period.

D. In assessing liquidity, data will be obtained from the exchanges where the constituent is listed.

E. In exceptional market conditions, in which trading volumes are unusually low, FTSE Russell and Nareit may agree that the minimum percentage figure with respect to turnover stated above be reduced in order to avoid a large amount of turnover of the constituents in the FTSE Nareit Composite Index.

### Screen Three - Invested Assets

Only tax qualified REITs with at least 75 percent of their total assets invested in qualifying real estate assets, which include interests in real property (at non-depreciated cost), interests in mortgages on
real property, or shares in other REITs will be included in the index. New issues, including initial public offerings, with qualifying real estate assets less than 75 percent of their total assets but equal to at least 125 percent of their net IPO proceeds also will be included in the index. The invested assets test will be conducted on an annual basis at the December annual review and if total invested assets of any constituent of the index fall below 50 percent of its total assets, the constituent will be deleted from the index.

5.7 Screen Four - Free Float

5.7.1 A security that has a free float of 5% or below will be ineligible for the FTSE Nareit Composite Index and the FTSE Nareit Real Estate 50 Index.

5.8 Screen Five – UBTI Screen

5.8.1 Companies that produce unrelated business taxable income (UBTI) are restricted from ownership for tax-exempt investors. In recognition of this, FTSE Russell screens all REIT’s, removing any security from eligibility that generates or has historically generated UBTI and has not taken steps to block UBTI to equity holders. The research process is conducted on an annual basis in advance of the June quarterly review. Additional screening will not be assessed or changed outside of the June index review period. Information used to confirm UBTI impact includes the following publicly available sources: 10-K, SEC Form S-3, K-1, company annual report, dividend notices or company website.

5.8.2 For UBTI to be passed to a security holder, the UBTI must be produced by the company directly. UBTI incurred by a subsidiary will not be realized by the holder of the parent entity and would not require removal of the parent company from eligibility.

5.8.3 If a company restructures to block UBTI, they will remain eligible for index inclusion. Acceptable forms of restructure are as follows:

1. Formal creation of a shell entity or offshore vehicle ensuring that any dividend payment is void of UBTI.

2. If within a public filing (SEC filing, dividend disclosure, press release) the company declares that any UBTI producing assets have been sold AND no future intent to purchase UBTI producing assets exists. This declaration of intent must clearly state that the company’s past investment strategy has changed, and the intent is to remove the exposure of UBTI to the end holder.

5.8.4 UBTI screening will be conducted in line with the June review each year and applied to the FTSE Nareit tradeable indexes such as the FTSE Nareit Composite, FTSE Nareit 50, FTSE Nareit Equity REITs, FTSE Nareit All Equity REITs, FTSE Nareit RORI REITs Index and FTSE Nareit Mortgage REITs. The UBTI screen will not apply to the FTSE Nareit All REITs Index. The research cut-off date for the UBTI screen will fall in May each year and be in line with the Russell US Equity Indexes UBTI cut-off date.

5.9 Adjustments Applied to Eligible Securities

Eligible securities may be subject to adjustment for free float and multiple lines; see Rules 5.9.1 and 5.11.

5.9.1 Investability Weightings

Constituents of the FTSE Nareit Composite Index, and associated headline indexes are adjusted for free float.

Further details on free float restrictions can be accessed using the following link: Free_Float_Restrictions.pdf
A. **Initial Weighting**

Free float is calculated using available published information rounded to 12 decimal places. Companies with a free float of 5% or below are excluded from the index.

B. **Foreign ownership restrictions**

FTSE Russell index methodology takes account of the restrictions placed on the equity holdings of foreigners in a company where these have been imposed by a government, regulatory authority or the company’s constitution.

Where the presence of a foreign ownership restriction creates a limit on foreign ownership (the Foreign Ownership Limit or FOL) that is more restrictive than the calculated free float for a company, the precise Foreign Ownership Limit is used in place of the free float for the purposes of calculating the company’s investability weight.

If the foreign ownership restriction is less restrictive or equal to the free float restriction, the free float restriction is applied, subject to Rule A above.

5.10 **Minimum Voting Rights**

- Companies assigned a developed market nationality (please see Appendix E for a list of developed markets) are required to have greater than 5% of the company’s voting rights (aggregated across all of its equity securities, including, where identifiable, those that are not listed or trading) in the hands of unrestricted shareholders or they will be deemed ineligible for index inclusion. Emerging market securities are not subject to this requirement.

- Existing constituents with a developed market nationality who do not currently meet the above requirement have a 5 year grandfathering period to comply. If subsequently they continue to fail the minimum voting rights requirement they will be removed from FTSE Russell indexes at the September 2022 review.

- The percentage of a company’s voting rights in public hands is calculated as:

\[
\text{The number of votes in the hands of shareholders that are unrestricted as determined by the application of FTSE Russell free float definitions} \\
\text{The total number of votes conferred by the shares outstanding of all the company’s voting securities including those that have not been admitted to trading on a regulated venue}
\]

**For example,** Company A has 100m listed Class A shares each conferring one vote, free float is 65%. It also has 300m unlisted Class B shares each conferring 10 votes.

The test to assess whether the listed Class A line has the required greater than 5% of the company’s voting rights is as follows:

\[
\frac{65m \text{ (i.e. } 100m \text{ Class A voting rights } \times \text{ 65% float})}{3.1bn \text{ (i.e. } 100m \text{ Class A } + \text{ 3bn Class B})} = 2.097\% \text{ of the company’s voting rights in public hands}
\]

5.11 **Multiple Lines**

Where there are multiple lines of equity capital in a company, all are included and priced separately, provided that:

- All lines pass all screens (see Rules 5.4, 5.5, 5.6 and 5.7).
• All partly-paid classes of equity are priced on a fully-paid basis if the calls are payable at known future dates. Those recognized as being “permanently partly-paid” are priced on a partly-paid basis.

• Where a company has multiple lines and becomes eligible for inclusion in the FTSE Nareit Real Estate 50 Index, only the largest of the multiple lines (by investable market capitalization) will be included as an index constituent.

5.12 FTSE Nareit New Property Sector Entry Rule

5.12.1 For a new property sector to be created and included in the FTSE Nareit US Real Estate Index Series, the companies included in such property sector must have a minimum combined sector level weight greater than 3% of the FTSE Nareit All Equity REITs Index by investable market capitalization.  

A. Addition of a new index constituent

A new property sector will be created and populated by the new constituent if the investable market capitalization of the new constituent is greater than 3% of the investable market capitalization of the FTSE Nareit All Equity REITs Index following inclusion of the new constituent.

Example 1

• New addition Company A has an investable market capitalization of $20bn.
• Total investable market cap of FTSE Nareit All Equity REITs Index before inclusion is $800bn.
• Percentage weight of Company A following inclusion in the FTSE Nareit All Equity REITs Index = $20 / ($800+$20) = 2.44%.

In this example, a new property sector would not be created and Company A would be added to the Equity Speciality Property Sector.

Example 2

• New addition Company A has an investable market capitalization of $20bn.
• Total investable market cap of FTSE Nareit All Equity REITs Index before inclusion is $800bn.
• Other existing constituents for a new property sector have a combined investable market capitalization of $10bn.
• Percentage weight of Company A combined with that of other existing constituents = ($20 + $10) / ($800 + $20) = $30 / $820 = 3.66%.

In this example, a new property sector would be created in conjunction with the annual December review and rebalance.

B. Combined investable market capitalization of existing constituents

When the combined investable market capitalization of one or more existing constituents with a common property sector focus grows to exceed 3% of the investable market capitalization of the FTSE Nareit All Equity REITs index for two consecutive quarters, a new sector will be created and included in the FTSE Nareit Index Series for those constituents in conjunction with the annual December review and rebalance.

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2Note: The changes to Rule 5.91 which were announced in June 2015 will take effect on 21 January 2016.
C. There will not be a minimum investable market capitalization requirement for existing property sectors. Existing property sectors will remain in the FTSE Nareit Classification structure as long as they contain eligible index constituents. Upon deletion of the last eligible index constituent, the property sector will cease to be calculated and will only recommence if it passes the index eligibility criteria for a new property sector as stated in Rule 5.12.

5.13 FTSE Nareit Real Estate 50 Index Qualification Criteria and Annual Review

5.13.1 The FTSE Nareit Real Estate 50 Index consists of the largest 50 eligible REITs within the FTSE Nareit Composite Index when ranked by full equity market capitalization.

5.13.2 Where a company has multiple lines and becomes eligible for inclusion in the FTSE Nareit Real Estate 50 Index, only the largest of the multiple lines (by investable market capitalization) will be included as an index constituent.

5.13.3 A security will be inserted into the FTSE Nareit Real Estate 50 Index at the annual review if it rises to 40th position or above when the eligible companies are ranked by full market capitalization (before the application of any investability weightings). In determining the full market capitalization of a company for this purpose, all share classes are included, while only the eligible share classes are included in the index weighting.

5.13.4 A security in the FTSE Nareit Real Estate 50 Index will be deleted at the annual review if it falls to 61st position or below when the eligible companies are ranked by full market capitalization (before the application of any investability weightings). In determining the full market capitalization of a company for this purpose, all share classes are included, while only the eligible share classes are included in the index weighting.

5.13.5 A constant number of constituents will be maintained for the FTSE Nareit Real Estate 50 Index. Where a greater number of securities qualify to be inserted in the Index than those qualifying to be deleted (see Rules 5.13.3 and 5.13.4), the lowest ranking constituents presently included in the index will be deleted in equal number to the securities qualifying for insertion to ensure that an equal number of securities are inserted and deleted at the annual review. Likewise, where a greater number of securities qualify to be deleted than those qualifying to be inserted (see Rules 5.13.3 and 5.13.4), the highest ranking securities which are presently not included in the index will be inserted in equal number to the securities being deleted to match the number of securities being deleted at the annual review.

5.14 FTSE Nareit Real Estate 50 Index Reserve Lists

5.14.1 FTSE Russell is responsible for publishing the five highest ranking non-constituents of the FTSE Nareit Real Estate 50 Index following each quarterly revision to the FTSE Nareit US Real Estate Index Series. This Reserve List will be used in the event that one or more constituents are deleted from the FTSE Nareit Real Estate 50 Index during the period up to the next annual review of the index series. Securities on the Reserve List will be constituents of the FTSE Nareit Composite Index. Where a security is removed from the index series (under Section 6.0) after periodic changes to the index series have been announced but before the periodic changes have been implemented, the highest ranking security by full market capitalization from the new Reserve List (excluding current index series constituents) will replace the deleted security.

5.15 FTSE Nareit RORI REITs Index

5.15.1 The FTSE Nareit RORI REITs Index will consist of constituents of the FTSE Nareit Composite Index that are classified in the following property sectors: FTSE Nareit Retail, FTSE Nareit Office, FTSE Nareit Residential or FTSE Nareit Industrial.
Section 6
Additions Outside of a Review

6.0 Changes to Constituent Companies
6.1 Additions Outside of a Review
6.1.1 Fast Entry

Where a company, whether an existing constituent or not, undertakes an Initial Public Offering of a new equity security, that security will be eligible for fast entry inclusion to the FTSE Nareit Index Series if its full market capitalization using the closing price on the first day of trading is greater than the market capitalization of the security ranked 10th position or higher in the FTSE Nareit Real Estate 50 Index, before the application of individual constituent investability weightings. The new security will be included as a constituent in the FTSE Nareit Real Estate 50 Index and other FTSE Nareit tradable indexes after the close of business on the fifth day of official trading. The security which is the lowest ranking constituent of the FTSE Nareit Real Estate 50 Index based on full equity market capitalization after the close of business on the first day of official trading of the new issue will be selected for removal and related indexes adjusted.

If the fifth day of trading is in close proximity to an index review, FTSE Russell may use its discretion to include a fast entrant at the index review date following advance notice.

Please note: Only those shares being offered for sale in the IPO will be included within the index weighting at the time of fast entry inclusion (subject to not being categorised as restricted shares as defined within the Free Float Restrictions document).

REIT initial public offerings will continue to be added to the FTSE Nareit All REITs Index after the close of business on the first day of official trading, as this index consists of all publicly traded REITs in accordance with Rule 1.1.1.

In all cases, advance notification confirming the timing of the inclusion of the new constituent will be given accordingly.

6.1.2 Variable and best effort IPOs* will not be considered for fast entry inclusion since FTSE Russell would be:

- unable to confirm if the minimum free float requirement has been met; and
- unable to assign an accurate free float for the purposes of the index calculation.

Direct listing IPOs will be eligible for consideration for fast entry inclusion if there is confirmation, before the close of trading on the first day of listing, of the number of shares that have been made available (e.g. specific holders have publicly disclosed a commitment to sell a number of shares). If
there is no disclosure before the close of trading on the first day of listing, the company will not be considered as a potential fast entry addition.

6.1.3 Variable and best effort IPOs and those direct listing IPOs (which do not qualify as a fast entrant) will be considered for index inclusion at the next quarterly review if, by the review cut-off date, a public disclosure* is available confirming either the actual number of shares sold during the offering or the post IPO shareholder structure. Index inclusion remains subject to meeting all other eligibility criteria. If the number of shares sold during the IPO, or the post IPO shareholder structure, remains unknown on the review cut-off date, the evaluation of the company will be deferred to a subsequent quarterly review.

*A public disclosure is typically by way of a company filing, stock exchange notice or shareholding regulatory announcement.

6.2 Quarterly Additions into the Index Series

6.2.1 New issues of companies which do not qualify for Fast Entry under Rule 6.1.1, but which meet the criteria for eligible securities set out in Section 5 and Rule 6.2.3, and have been listed for over 20 business trading days, will be eligible for inclusion in the FTSE Nareit Composite Index. The data will be compiled as at the close of business on the Monday 4 weeks prior to the review effective date. The changes will be effective after the close of business on the third Friday in March, June, September and December.

6.2.2 New issues of companies which do not qualify for inclusion in the FTSE Nareit Composite Index, but meet the criteria for eligible securities set out in Rules 1.1.1 and 6.2.3 will be eligible for inclusion in the FTSE Nareit All REITs Index.

6.2.3 To qualify as a REIT, a company is required to meet several criteria, as defined by the U.S. Internal Revenue Code, intended to make certain that the company is largely devoted to publicly traded real estate. Companies that elect REIT status in a particular year are required to file Form 1120-REIT in respect of that particular year with the U.S. Internal Revenue Service.

When a publicly traded company elects to convert to a REIT, FTSE Russell and Nareit will determine an appropriate date when the company becomes eligible for inclusion in the index series, consistent with Rules 6.2.1 and 6.2.2, such time being the later of the following two events:

- Assuming that the company is expected to make one or more non-zero distributions of accumulated earnings and profits during the taxable year with respect to which it first intends to elect and to qualify to be treated as a REIT for federal income tax purposes (all as indicated by the company’s public announcements), the date on which the company makes the final distribution to its shareholders (i.e. pay date of the dividend distribution), or
- The first day of the company’s first taxable year with respect to which the company intends to elect and to qualify to be treated as a REIT for federal income tax purposes (as indicated by the company’s public announcements).

6.3 Deletions Outside of Reviews

6.3.1 Takeovers, Mergers and Demergers

6.3.2 The treatment of takeovers, mergers and demergers can be found within the Corporate Actions and Events Guide.

6.3.3 Where the deletion is a constituent of the FTSE Nareit Real Estate 50 Index, it will be replaced by the highest ranking company eligible in the FTSE Nareit Real Estate 50 Index Reserve List selected as at the close of the index calculation two days prior to the deletion.

6.3.4 The removal and replacement are effected simultaneously, with the provision of a minimum two day notice period.
6.3.5 In the event that an index constituent of the FTSE Nareit All REITs Index Series announces that it has failed to qualify to be taxed as a REIT for federal tax purposes, FTSE Russell and Nareit will review the status of the company on a 20 trading day cycle and seek guidance from the FTSE Nareit Index Series Advisory Committee as to the most appropriate course of action based on the particular circumstances, including the length of time it will take to restate the financial reports. FTSE Russell and Nareit will provide sufficient advanced notification before implementing any change to the index eligibility of the aforementioned index constituent.

6.3.6 In the event that an index constituent of the FTSE Nareit All REITs Index Series announces that it will no longer elect to operate as a REIT in accordance with the U.S. Internal Revenue Code, FTSE Russell will delete the index constituent from the FTSE Nareit All REITs Index Series effective at the date, or as soon as practicable following the date, on which the constituent announces it will no longer operate as a REIT.
Section 7

Corporate Actions and Events

7.0 Corporate Actions and Events

7.1 Full details of changes to constituent companies due to corporate actions and events can be accessed in the Corporate Actions and Events Guide using the following link:

Corporate_Actions_and_Events_Guide.pdf

A Corporate ‘Action’ is an action on shareholders with a prescribed ex date. The share price will be subject to an adjustment on the ex date. These include the following:

- Capital Repayments
- Rights Issues/Entitlement Offers
- Stock Conversion
- Splits (sub-division) / Reverse splits (consolidation)
- Scrip issues (Capitalisation or Bonus Issue)

A Corporate ‘Event’ is a reaction to company news (event) that may impact the index depending on the index rules. For example, a company announces a strategic shareholder is offering to sell their shares (secondary share offer) – this could result in a free float weighting change in the index. Where an index adjustment is required FTSE Russell will provide notice advising of the timing of the change.

7.2 Spin-offs

7.2.1 FTSE Nareit 50 Index

If a constituent company of the FTSE Nareit 50 index splits and forms two or more companies by issuing new equity to existing shareholders and the resulting companies are eligible* REITS, then the lowest ranking constituent based on full market capitalisation at the close on day one of trading will be deleted from the index with two days notice. Consequently, the FTSE Nareit 50 index may have more than its fixed number of 50 companies for three days.
7.2.2 FTSE Nareit US Real Estate Index Series (excluding FTSE Nareit 50 Index)

If a constituent company splits and forms two or more companies by issuing new equity to existing shareholders, and the resulting companies are eligible* REITS, they will be retained as constituents in the same indexes within the FTSE Nareit US Real Estate Index Series as their predecessor company. Where eligible to continue as a constituent, the spin-off entity (entities) will remain in the same indexes as the parent company until the next quarterly review, where subject to there being a minimum three month trading record, it will be tested for liquidity as a new issue and be re-ranked or deleted, if below the exit threshold.

*Where a split results in the inclusion of an ineligible non-REIT, the security will remain in the index for two trading days and then be deleted at market price or if no market price is available, at zero value.

For further details please refer to the Corporate Actions and Events Guide.

7.3 Investability Weightings

7.3.1 Changes to free float for constituent securities are covered in the Corporate Actions and Events Guide.

7.4 Suspension of Dealing

Suspension of Dealing rules can be found within the Corporate Actions and Events Guide.

7.4.1 If the constituent subject to a suspension is deleted from the FTSE Nareit Real Estate 50 Index, it will be replaced with the highest ranking company on the Reserve List as at the close of the index calculation on the day preceding the inclusion of the replacement company. This change will be effective after the close of the index calculation and prior to the start of the index calculation on the following day.
Section 8

Changes to Classification of Constituent Companies

8.0 Changes to Classification of Constituent Companies

8.1 Where a constituent is the subject of a merger, restructuring or takeover which results in a constituent, or part of a constituent, being absorbed by another, FTSE Russell will make the necessary adjustments to the relevant investment sector, property sector and property sub-sector at the same time that the constituent changes are implemented.

8.2 Periodic changes to FTSE Nareit industry classification of a company will be agreed and announced by Nareit and FTSE Russell (for further details, see Appendix B). Periodic changes to the investment sector, property sector and property sub-sector classification of a company will be agreed and announced by Nareit and FTSE Russell. Such changes will be implemented after the close of the index calculation on the third Friday of the month.
Section 9

Announcing Changes

9.0 Announcing Changes

9.1 Changes to Constituents

9.1.1 Decisions regarding the addition of new, eligible constituents (which are unrelated to existing index constituents or changes to the investable weighting of existing constituents) are announced at the earliest possible time before their inclusion in the index series. However, the announcement may be contingent upon the confirmation of the listing date of the security and passing all eligibility screens under Section 5.0.

9.1.2 The index review is published after US market close on the Tuesday before the first Friday of March, June, September and December.

9.1.3 Implementation of any annual review or quarterly revision changes will happen after the close of business on the third Friday in March, June, September or December. Details of FTSE Nareit Index Series Advisory Committee meeting dates are available from FTSE Russell (see Appendix F).

9.1.4 Announcements will be made after the close of index calculations.
Appendix A: Index Opening and Closing Hours

The FTSE Nareit US Real Estate Index Series will calculate between the following hours:

<table>
<thead>
<tr>
<th>Open</th>
<th>Close</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:30</td>
<td>16:10</td>
</tr>
</tbody>
</table>

Notes:

1. Closing prices are downloaded from Thomson Reuters at 16:30. Because the New York Stock Exchange and NASDAQ do not release official closing prices until several hours later, the price used in the index may not match this official close. If the downloaded closing price is subsequently overwritten by the official closing price, the downloaded closing price is retained in the index calculation.

2. The indexes will be calculated during normal trading hours of the New York Stock Exchange and NASDAQ and will be closed on US holidays.

3. Timings are based on Eastern Standard Time (EST).
Appendix B: FTSE Nareit US Real Estate Index Series Classification System

The FTSE Nareit US Real Estate Index Series Classification System consists of three levels - investment sectors, property sectors and property subsectors. The investment sectors include:

- **All Equity Real Estate Investment Trusts (All Equity REITs)**
  
  Equity REITs include all tax-qualified REITs (see Rule 1.1.1) with more than 50 percent of total assets in qualifying real estate assets other than mortgages secured by real property.

- **Equity Real Estate Investment Trusts (Equity REITs)**
  
  This investment sector includes all Equity REITs not designated as Timber REITs or Infrastructure REITs. Timber REITs invest in timber assets, including timberland and timber-related products and activities. Infrastructure REITs invest in infrastructure assets, including transportation assets (roads, bridges, tunnels, airports, etc.), energy and utilities assets (power generation, fuels, pipelines, etc.), water and waste management assets and communication assets (line-based networks, air-based networks, etc.). Infrastructure REITs do not include data center REITs.

- **FTSE Nareit RORI REITs Index**
  
  The FTSE Nareit RORI REITs Index consists of constituents of the FTSE Nareit Equity REITS Index that are classified as either:

  - Residential, Office, Retail, or Industrial
  
  Or

  - Diversified and have a combined ownership of RORI eligible properties in excess of 75 percent of total property ownership

- **Mortgage Real Estate Investment Trusts (Mortgage REITs)**
  
  Mortgage REITs include all tax-qualified REITs with more than 50 percent of total assets invested in mortgage loans or mortgage-backed securities secured by interests in real property.
The FTSE Nareit US Real Estate Index Series Classification System also includes the following 14 property sectors, and 6 property subsectors.

- **All Equity REITs**
- **Property Sector / Property Subsector**
  
  A company is classified in one of the following property sectors and property subsectors if 75 percent or more of its gross invested book assets is invested in that specific sector and subsector.

  - FTSE Nareit Health Care
  - FTSE Nareit Self Storage
  - FTSE Nareit Industrial
  - FTSE Nareit Office
  - FTSE Nareit Residential
    - FTSE Nareit Apartments
    - FTSE Nareit Manufactured Homes
    - FTSE Nareit Single Family Homes
  - FTSE Nareit Retail
    - FTSE Nareit Shopping Centers
    - FTSE Nareit Regional Malls
    - FTSE Nareit Free Standing
  - FTSE Nareit Lodging/Resorts
  - FTSE Nareit Data Centers

  A company is classified in the following property sector if it has 75 percent or more of its gross invested book assets invested in a single property sector not listed within the property sectors and subsectors above.

  - FTSE Nareit Specialty

  A company is classified in the following property sector if it owns, manages and leases substantial assets across two or more property sectors where none meet the 75% gross invested book assets threshold for any single property sector.

  - FTSE Nareit Diversified

  A company is classified in the following property sector if 75 percent or more of its gross invested book assets is invested in timberland and timber-related products and activities.

  - FTSE Nareit Timber

  A company is classified in the following property sector if 75 percent or more of its gross invested book assets are invested in infrastructure assets, including transportation assets (roads, bridges, tunnels, airports, etc.), energy and utilities assets (power generation, fuels, pipelines, etc.), water and waste management assets and communication assets (line-based networks, air-based networks, etc.).

  - FTSE Nareit Infrastructure

- **Mortgage REITs**

  A company is classified in one of the following property sectors and property subsectors if 75 percent or more of its gross invested book assets is invested in that specific sector and subsector.

  - FTSE Nareit Mortgage Home Financing
  - FTSE Nareit Mortgage Commercial Financing
Appendix C: Status of Indexes

The indexes in the FTSE Nareit US Real Estate Index Series that are calculated in real time are made available with one of the following designations:

A) Firm
   i) The indexes are active and being calculated during Official Market Hours using prices on the eligible exchanges (see Rule 1.1.1). No message will be displayed against the index value.
   ii) The Official Closing Prices for the indexes are described in Appendix A.

B) Closed
   The indexes have ceased all calculations for the day. The message ‘CLOSE’ will be displayed against the index value calculated by FTSE Russell.

C) Held
   During Official Market Hours, an index has exceeded pre-set operating parameters, and the calculation has been suspended pending resolution of the problem. The message ‘HELD’ will be displayed against the last index value calculated by FTSE Russell.

D) Indicative
   If there is a system problem or situation in the market that is judged to affect the quality of the constituent prices at any time when an index is being calculated, the index will be declared indicative, e.g. normally where a 'fast market' exists in the equity market. The message ‘IND’ will be displayed against the index value calculated by FTSE Russell.

The official opening and closing hours of the FTSE Nareit US Real Estate Index Series are set out in Appendix A. Variations to the official hours of the Series will be published by FTSE Russell.
# Appendix D: Eligible Exchanges and Market Segments

<table>
<thead>
<tr>
<th>Country</th>
<th>Exchange</th>
<th>Segment Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>New York Stock Exchange</td>
<td>NYSE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NYSE MKT</td>
</tr>
<tr>
<td></td>
<td>NASDAQ</td>
<td>Capital Market</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Global Select</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Global Market</td>
</tr>
</tbody>
</table>
Appendix E: Standard Non-US Dollar Indexes

<table>
<thead>
<tr>
<th>Index</th>
<th>Currency Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTSE Nareit Equity REITS (TTM JPY) Index</td>
<td>T+1 Telegraphic Transfer Middle Rate (TTM)</td>
</tr>
<tr>
<td></td>
<td>The TTM rate is only available after US close and is therefore applied on the next business day</td>
</tr>
</tbody>
</table>
Appendix F: Further Information

A Glossary of Terms used in FTSE Russell’s Ground Rule documents can be found using the following link: Glossary.pdf

Further information on the FTSE Nareit US Real Estate Index Series is available from FTSE Russell. For contact details please visit the FTSE Russell website or contact FTSE Russell client services at info@ftserussell.com.

Website: www.ftserussell.com


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