



INDEX METHODOLOGY

PHLX HOUSING SECTOR INDEX™

HGX

INDEX DESCRIPTION

The PHLX Housing Sector Index is designed to measure the performance of a set of companies involved with the U.S. housing construction market.

SECURITY ELIGIBILITY CRITERIA

Eligible security types

Security types eligible for the Index generally include common stocks, limited partnership interests, ordinary shares and shares of beneficial interest.

Multiple classes of securities

One security per issuer is permitted. If an issuer has multiple listed security classes, the security with the highest three-month average daily traded value generally is considered for inclusion in the Index. A current Index Security that meets all other criteria for Index inclusion may remain in the Index even when another security issued by the same issuer has a higher average daily traded value.

Eligible exchanges

A security must be listed on The Nasdaq Stock Market®, New York Stock Exchange, NYSE American or Cboe BZX Exchange.

Industry or sector eligibility

A security must be classified at the subsector level as Building, Roofing/Wallboard and Plumbing, Building: Climate Control, Cement, Building Materials: Other, Home Construction, or Mortgage Finance as defined by the Industry Classification Benchmark (ICB), must be issued by a company whose primary line of business is directly associated with the U.S housing construction market. ICB is a product of FTSE International Limited that is used under license.

Index Securities as of October 31, 2008, have been grandfathered for industry or sector eligibility; as such some Index Securities may not be classified as indicated above. Such securities will be removed from the Index if they fail to meet the other eligibility criteria or if there is a material change in their line of business.

Market capitalization eligibility

For initial inclusion, a security must have a market capitalization of at least \$100 million (USD).

For continued inclusion, a security must have a market capitalization of at least \$60 million (USD).

Liquidity eligibility

A security must have a monthly traded volume of at least 1.5 million shares in each of the last six (6) calendar months.

Seasoning eligibility

A security must have traded for at least six (6) full calendar months, not including the month of initial listing, on one of the Eligible exchanges.

Other eligibility criteria

A security must have listed options that trade on a recognized options market in the U.S. or must be eligible for listed options that would trade on a recognized options market in the U.S.

If Nasdaq becomes aware that an issuer or security will soon undergo a fundamental change that makes it ineligible, Nasdaq will remove the security from consideration. This includes entering into a definitive merger or acquisition agreement or other pending arrangement that would make it ineligible for Index inclusion, or a filing of bankruptcy or similar protection from creditors.

INDEX CALENDAR

Reconstitution

The Index does not undergo a Reconstitution.

Rebalance schedule

The Index is rebalanced quarterly in March, June, September and December.

Rebalance reference dates

The Index Rebalance uses the Total Shares Outstanding and Last Sale Price of all Index Securities as of the prior month-end (February, May, August and November respectively).

Rebalance announcement dates

Index Rebalances are generally announced five (5) trading days prior to the effective date of the Rebalance.

Rebalance effective dates

Index Rebalances become effective at market open the next trading day after the third Friday in March, June, September and December.

CONSTITUENT SELECTION

Constituent selection process

In connection with the Addition policy or Replacement policy, securities eligible for inclusion as of the end of the last full calendar month are ranked ascending by market value, price and percentage price change over the previous six (6) calendar months. The security with the highest overall ranking and same ICB Sector as the deletion is added to the Index (if multiple securities have the same rank, then the security with the largest market capitalization is considered first) provided that the Index then meets the following criteria:

- No single Index Security is greater than 20% of the weight of the Index and the top five (5) Index Securities are not greater than 55% of the weight of the Index.
- No more than 15% of the weight of the Index is composed of non-U.S. component securities that are not subject to comprehensive surveillance agreements.

In the event that the highest ranking security does not permit the Index to meet the above criteria, the next highest-ranking security is selected and the criteria will again be applied to determine eligibility. The process will continue until a qualifying replacement is selected. In the event that all securities from the same ICB Sector as the deletion are not eligible based on the above process, the process will continue beginning with highest ranked security regardless of ICB Sector until a qualifying replacement is selected.

CONSTITUENT WEIGHTING

Constituent weighting scheme

The Index is a modified market capitalization-weighted index.

Constituent weighting process

HGX employs a two-stage weight adjustment scheme at the Index Rebalancing.

Index Securities' initial weights are determined by dividing each Index Security's market capitalization by the aggregate market capitalization of all Index Securities.

Stage 1

Initial index weights are adjusted to meet the following Stage 1 constraint, producing the Stage 1 weights:

- No Index Security weight may exceed 15%.

Stage 2

Stage 1 weights are adjusted to meet the following Stage 2 constraints, producing the final weights:

- For Index Securities with the two largest market capitalizations, Stage 1 weights are maintained.
- For all other Index Securities, no weight may exceed 8%.

The final weights meet the following constraints:

- No Index Security weight may exceed 15% of the index; two may exceed 8%.

Additional weighting considerations

The Index as a whole must meet the following criteria on a continual basis unless otherwise noted:

- No single Index Security is greater than 25% of the weight of the Index and the top five (5) Index Securities are not greater than 60% of the weight of the Index (measured semi-annually the first trading day in January and July).
- No more than 18% of the weight of the Index is composed of non-U.S. Index Securities that are not subject to comprehensive surveillance agreements.
- The total number of Index Securities has not increased or decreased by 33 1/3% of the Index and in no event will be less than nine (9).
- Index Securities representing at least 95% of the weight of the Index each have a market capitalization of at least \$75 million.
- Index Securities representing at least 92% of the weight of the Index and at least 82% of the total number of Index Securities meet the security options eligibility rules.
- Index Securities must have trading volume of at least 600,000 shares for each of the last six (6) months except that for each of the lowest weighted Index Securities that in the aggregate account for no more than 5% of the weight of the Index, trading volume must be at least 500,000 shares for each of the last six (6) months.
- The lesser of the five (5) highest weighted Index Securities or the highest weighted Index Securities that in the aggregate represent at least 30% of the total number of Index Securities each have had an average monthly trading volume of at least 1,250,000 shares over the past six (6) months.

In the event the Index does not meet these criteria, the Index composition is adjusted to ensure that the Index meets the criteria. Index Securities that contribute to the Index not meeting the criteria may be removed. Index Securities may be added and/or replaced according to the component replacement rules to ensure compliance with these criteria.

Please refer to the **Nasdaq Index Weight Calculations** for further information.

INDEX MAINTENANCE

Deletion policy

If, at any time during the year, an Index Security no longer meets the Eligibility Criteria, or is otherwise determined to have become ineligible for inclusion in the Index, it is removed from the Index. This includes circumstances where an Index Security is determined to be ineligible for continued inclusion in the Index due to bankruptcy, delisting, or a definitive agreement that would likely result in the security no longer being Index eligible. Please refer to **Nasdaq's Corporate Actions and Events Manual – Equities** for detailed handling of the aforementioned event types.

Replacement policy

A security may be added to the Index when there is a deletion.

Addition policy

A security may be added to the Index in the event the Index no longer meets the Additional weighting considerations.

Corporate actions

In the interim periods between scheduled rebalancing events, individual Index securities may be the subject to a variety of corporate actions and events that require maintenance and adjustments to the Index. Specific treatment of each type of corporate action or event is described in the **Nasdaq Corporate Actions and Events Manual – Equities**, which is incorporated herein by reference.

In certain cases, corporate actions and events are handled according to the weighting scheme or other index construction techniques employed. Wherever alternate methods are described, the Index will follow the "Market Cap Corporate Action Method."

At the quarterly rebalancing, no changes are made to the Index from the previous month end until the quarterly share change effective date, with the exception of corporate actions with an ex-date.

Index share adjustments

Changes in the price and/or Index Shares driven by corporate events such as stock dividends, stock splits and certain spin-offs and rights issuances are adjusted on the ex-date.

For handling of changes in total shares outstanding (TSO) greater than 10% arising from other corporate events, please refer to **Nasdaq Corporate Actions and Events Manual – Equities**.

ADDITIONAL INFORMATION

Announcements

Nasdaq announces Index-related information via the Nasdaq Global Index Watch (GIW) website at <http://indexes.nasdaqomx.com>.

For more information on the general Index Announcement procedures, please refer to the **Nasdaq Index Methodology Guide**.

Holiday schedules

The Indexes are calculated Monday through Friday, except on days when the Nasdaq U.S. exchange is closed.

Unexpected market closures

For information on Unexpected Market Closures, please refer to the **Nasdaq Index Methodology Guide**.

Calculation types

For information on the Index calculation types as well as the mathematical approach used to calculate the Index(es), please refer to the **Calculation Manual – Equities & Commodities**.

Recalculation and restatement policy

For information on the Recalculation and Restatement Policy, please refer to the **Nasdaq Index Recalculation Policy**.

Data sources

For information on data sources, please refer to the **Nasdaq Index Methodology Guide**.

Contact information

For any questions regarding an Index, please contact the Nasdaq Index Client Services team at indexservices@nasdaq.com.

Index dissemination

Index values and weightings information are available through Nasdaq Global Index Watch (GIW) website at <https://indexes.nasdaqomx.com/> as well as the Nasdaq Global Index FlexFile Delivery Service (GIFFD) and Global Index Dissemination Services (GIDS). Similar to the GIDS offerings, Genium Consolidated Feed (GCF) provides real-time Index values and weightings for the Nordic Indexes.

For more detailed information regarding Index Dissemination, see the **Nasdaq Index Methodology Guide**.

Index calculation and dissemination schedule

The Index is calculated during the trading day and is disseminated once per second from 09:30:01 to 16:00:00 ET.

Website

For further information, please refer to Nasdaq GIW website at <https://indexes.nasdaqomx.com/>.

FTP and dissemination service

Index values and weightings are available via FTP on the Nasdaq Global Indexes FlexFile Delivery Service (GIFFD). Index values are available via Nasdaq's Global Index Dissemination Services (GIDS).

GOVERNANCE

Index governance

All Nasdaq Indexes follow the same governance structure. For a detailed list of this information, please see the **Nasdaq Index Methodology Guide**.

Nasdaq Index Management Committee

The Nasdaq Index Management Committee approves all new Index Methodologies. This committee is comprised of full-time professional members of Nasdaq. The committee meets regularly, and reviews items including, but not limited to, pending corporate actions that may affect Index constituents, statistics comparing the composition of the indexes to the market, companies that are being considered as candidates for addition to an Index, and any significant market events.

For a detailed overview of the Index Management Committee, please see the **Nasdaq Index Methodology Guide**.

Internal reviews of methodology

For a detailed description on internal reviews of the Methodology, please see the **Nasdaq Index Methodology Guide**.

Communication with stakeholders and consultations

For a detailed description on Consultations and Communications with Stakeholders, please see the **Nasdaq Index Methodology Guide**.

Index cessation

Nasdaq has a documented procedure that is followed for Index Cessation that includes termination/retirement of an Index or Index Family.

For more information, please refer to the **Nasdaq Index Cessation Policy**.

Discretionary adjustment

This Index Methodology was created by Nasdaq to achieve the aforementioned objective of measuring the underlying purpose of each Index governed by this methodology document. Any deviations from this methodology are made in the sole judgment and discretion of Nasdaq so that the Index continues to achieve its objective.

For more information on potential adjustments including Calculation and Pricing Disruptions, Expert Judgment, and Unexpected Reconstitution/Rebalances, please refer to the **Nasdaq Index Methodology Guide**.

GLOSSARY OF TERMS AS USED IN THIS DOCUMENT

For the glossary of key terms, please refer to the **Nasdaq Index Methodology Guide**.

DISCLAIMER

Nasdaq may, from time to time, exercise reasonable discretion as it deems appropriate in order to ensure Index integrity, including but not limited to, quantitative inclusion criteria. Nasdaq may also, due to special circumstances, if deemed essential, apply discretionary adjustments to ensure and maintain the high quality of the index construction and calculation. Nasdaq does not guarantee that any Index accurately reflects future market performance.

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APPENDIX: METHODOLOGY CHANGE LOG

Effective Date	Methodology Section	Description or Summary of Changes
May 28, 2021	Index Maintenance: Corporate Actions	Securities created as the result of spin-off events are automatically eligible for inclusion in the Index at the time of the spin-off event, replacing a policy of automatic removal.