



\* The original issue price will be between [97.40 and 100.00]% of the principal amount for certain investors, reflecting a foregone underwriting discount with respect to such notes; see “Supplemental Plan of Distribution (Conflicts of Interest)” on page PS-17 of this pricing supplement.

The issue price, underwriting discount and net proceeds listed above relate to the notes we sell initially. We may decide to sell additional notes after the date of this pricing supplement, at issue prices and with underwriting discounts and net proceeds that differ from the amounts set forth above. The return (whether positive or negative) on your investment in the notes will depend in part on the issue price you pay for such notes.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this pricing supplement, the accompanying product prospectus supplement, the accompanying prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense. The notes will not constitute deposits that are insured by the Canada Deposit Insurance Corporation, the U.S. Federal Deposit Insurance Corporation or any other Canadian or U.S. governmental agency or instrumentality.

RBC Capital Markets, LLC

Pricing Supplement dated \_\_\_\_\_, 2017.

---

## SUMMARY INFORMATION

We refer to the notes we are offering by this pricing supplement as the “offered notes” or the “notes.” Each of the offered notes, including your notes, has the terms described below. Please note that in this pricing supplement, references to “Royal Bank of Canada,” “we,” “our” and “us” mean only Royal Bank of Canada and all references to “\$” or “dollar” are to United States dollars. Also, references to the “accompanying prospectus” mean the accompanying prospectus, dated January 8, 2016, as supplemented by the accompanying prospectus supplement, dated January 8, 2016, of Royal Bank of Canada relating to the Senior Medium-Term Notes, Series G program of Royal Bank of Canada and references to the “accompanying product prospectus supplement PB-1” mean the accompanying product prospectus supplement PB-1, dated January 14, 2016, of Royal Bank of Canada.

This section is meant as a summary and should be read in conjunction with the section entitled “General Terms of the Notes” beginning on page PS-4 of the accompanying product prospectus supplement PB-1. Please note that certain features described in the accompanying product prospectus supplement PB-1 are not applicable to the notes. This pricing supplement supersedes any conflicting provisions of the accompanying product prospectus supplement PB-1.

### Key Terms

Issuer: Royal Bank of Canada

Underlier: the iShares® U.S. Real Estate ETF (Bloomberg symbol, “IYR UP Equity”)

Index: Dow Jones U.S. Real Estate Index<sup>SM</sup>

Specified currency: U.S. dollars (“\$”)

Denominations: \$1,000 and integral multiples of \$1,000 in excess of \$1,000. The notes may only be transferred in amounts of \$1,000 and increments of \$1,000 thereafter

Principal amount: each note will have a principal amount of \$1,000; \$ in the aggregate for all the offered notes; the aggregate principal amount of the offered notes may be increased if the issuer, at its sole option, decides to sell an additional amount of the offered notes on a date subsequent to the date of this pricing supplement

Purchase at amount other than principal amount: the amount we will pay you at the stated maturity date for your notes will not be adjusted based on the issue price you pay for your notes, so if you acquire notes at a premium (or discount) to principal amount and hold them to the stated maturity date, it could affect your investment in a number of ways.

The return on your investment in such notes will be lower (or higher) than it would have been had you purchased the notes at a price equal to the principal amount. Also, the buffer level would not offer the same measure of protection to your investment as would be the case if you had purchased the notes at the principal amount. See “If the Original Issue Price for Your Notes Represents a Premium to the Principal Amount, the Return on Your Notes Will Be Lower Than the Return on Notes for Which the Original Issue Price Is Equal to the Principal Amount or Represents a Discount to the Principal Amount” on page PS-12 of this pricing supplement

Cash settlement amount (on the stated maturity date): for each \$1,000 principal amount of your notes, we will pay you on the stated maturity date an amount in cash equal to:

- if the final underlier level is greater than or equal to the initial underlier level, the greater of (1) the threshold settlement amount, and (2) the sum of (i) \$1,000 plus (ii) the product of (a) \$1,000 times (b) the underlier return;
- if the final underlier level is less than the initial underlier level but greater than or equal to the buffer level, \$1,000; or
- if the final underlier level is less than the buffer level, the sum of (1) \$1,000 plus (2) the product of (i) the buffer rate times (ii) the sum of the underlier return plus the buffer amount times (iii) \$1,000. In this case, the cash settlement amount will be less than the principal amount of the notes, and you will lose some or all of the principal amount.

Initial underlier level (to be set on the trade date and may be higher or lower than the actual closing price of the underlier on the trade date):

Final underlier level: the closing price of the underlier on the determination date, except in the limited circumstances described under “General Terms of the Notes — Determination Dates and Averaging Dates” on page PS-5 of the accompanying product prospectus supplement PB-1 and subject to adjustment as provided under “General Terms of the Notes — Unavailability of the Level of the Underlier” on page PS-6 of the accompanying product prospectus supplement PB-1 and as provided under “—Anti-dilution Adjustments for Exchange Traded Funds” on page PS-9 of the accompanying product prospectus supplement PB-1.

Underlier return: the quotient of (1) the final underlier level minus the initial underlier level divided by (2) the initial underlier level, expressed as a percentage

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Threshold settlement amount (to be set on the trade date): for each \$1,000 principal amount of the notes, expected to be between \$1,248.40 and \$1,292.10

Buffer level: 90.00% of the initial underlier level (equal to an underlier return of -10.00%)

Buffer amount: 10.00%

Buffer rate: the quotient of the initial underlier level divided by the buffer level, which equals approximately 111.11%

Trade date:

PS-2

---

Original issue date (settlement date) (to be set on the trade date): expected to be the fifth scheduled business day following the trade date

Determination date (to be set on the trade date): a specified date that is expected to be between 36 and 39 months after the trade date, subject to adjustment as described under “General Terms of the Notes — Determination Dates and Averaging Dates” on page PS-5 of the accompanying product prospectus supplement PB-1

Stated maturity date (to be set on the trade date): a specified date that is expected to be the third scheduled business day after the determination date, subject to adjustment as described under “General Terms of the Notes — Stated Maturity Date” on page PS-5 of the accompanying product prospectus supplement PB-1

No interest: the offered notes will not bear interest

No listing: the offered notes will not be listed on any securities exchange or interdealer quotation system

No redemption: the notes are not subject to redemption prior to maturity

Closing price: the closing sale price or last reported sale price, regular way, for the underlier, on a per-share or other unit basis:

· on the principal national securities exchange on which that underlier is listed for trading on that day, or

· if the underlier is not listed on any national securities exchange, on that day, on any other U.S. national market system that is the primary market for the trading of that underlier.

If the underlier is not listed or traded as described above, then the closing price on any day will be the average, as determined by the calculation agent, of the bid prices for the underlier obtained from as many dealers in that underlier selected by the calculation agent as will make those bid prices available to the calculation agent. The number of dealers need not exceed three and may include the calculation agent or any of its or our affiliates.

Business day: as described under “General Terms of the Notes — Special Calculation Provisions — Business Day” on page PS-11 of the accompanying product prospectus supplement PB-1

Trading day: as described under “General Terms of the Notes — Special Calculation Provisions — Trading Day” on page PS-11 of the accompanying product prospectus supplement PB-1

Use of proceeds and hedging: as described under “Use of Proceeds and Hedging” on page PS-13 of the accompanying product prospectus supplement PB-1

ERISA: as described under “Employee Retirement Income Security Act” on page PS-20 of the accompanying product prospectus supplement PB-1

Calculation agent: RBC Capital Markets, LLC (“RBCCM”)

Dealer: RBCCM

U.S. tax treatment: by purchasing a note, each holder agrees (in the absence of a change in law, an administrative determination or a judicial ruling to the contrary) to treat the note as a pre-paid cash-settled derivative contract for U.S. federal income tax purposes. However, the U.S. federal income tax consequences of your investment in the notes are uncertain and the Internal Revenue Service could assert that the notes should be taxed in a manner that is different from that described in the preceding sentence. Please see the discussion in the accompanying prospectus under “Tax Consequences,” the discussion in the accompanying prospectus supplement under “Certain Income Tax Consequences,” and the discussion (including the opinion of our counsel Morrison & Foerster LLP) in the accompanying product prospectus supplement PB-1 under “Supplemental Discussion of U.S. Federal Income Tax Consequences,” and the discussion below under “Supplemental Discussion of U.S. Federal Income Tax Consequences,” which apply to the notes.

Canadian tax treatment: for a discussion of certain Canadian federal income tax consequences of investing in the notes, please see the section entitled “Tax Consequences – Canadian Taxation” in the accompanying prospectus

CUSIP no.: 78013GKZ7

ISIN no.: US78013GKZ71

FDIC: the notes will not constitute deposits that are insured by the Federal Deposit Insurance Corporation, the Canada Deposit Insurance Corporation or any other Canadian or U.S. governmental agency

The trade date, the determination date and the stated maturity date are subject to change. These dates will be set forth in the final pricing supplement that will be made available in connection with sales of the notes.

## HYPOTHETICAL EXAMPLES

The following table and chart are provided for purposes of illustration only. They should not be taken as an indication or prediction of future investment results and are intended merely to illustrate the impact that various hypothetical final underlier levels on the determination date could have on the cash settlement amount at maturity, assuming all other variables remain constant.

The examples below are based on a range of final underlier levels that are entirely hypothetical. No one can predict what the underlier level will be on any day during the term of your notes, and no one can predict what the final underlier level will be. The underlier has been highly volatile in the past—meaning that the underlier level has changed considerably in relatively short periods—and its performance cannot be predicted for any future period.

The information in the following examples reflects hypothetical rates of return on the notes assuming that they are purchased on the original issue date with a \$1,000 principal amount and are held to maturity. If you sell your notes in any secondary market prior to maturity, your return will depend upon the market value of your notes at the time of sale, which may be affected by a number of factors that are not reflected in the table below, such as interest rates and the volatility of the underlier. In addition, assuming no changes in market conditions or our creditworthiness and any other relevant factors, the value of your notes on the trade date (as determined by reference to pricing models used by RBCCM and taking into account our credit spreads) will be, and the price you may receive for your notes may be, significantly less than the principal amount. For more information on the value of your notes in the secondary market, see “Additional Risk Factors Specific to Your Notes — The Price, if Any, at Which You May Be Able to Sell Your Notes Prior to Maturity May Be Less than the Original Issue Price and Our Initial Estimated Value” below. The information in the table also reflects the key terms and assumptions in the box below.

### Key Terms and Assumptions

Principal amount	\$1,000
Hypothetical threshold settlement amount	\$1,248.40 per \$1,000 in principal amount
Buffer level	90.00% of the initial underlier level
Buffer rate	$\frac{\text{initial underlier level}}{\text{buffer level}}$ , which equals approximately 111.11%
Buffer amount	10.00%
Neither a market disruption event nor a non-trading day occurs on the originally scheduled determination date	

No change in or affecting the underlier or the policies of the underlier’s investment advisor or the method by which the sponsor of the index calculates the index

Notes purchased on original issue date at a price equal to the principal amount and held to the stated maturity date

Moreover, we have not yet set the initial underlier level that will serve as the baseline for determining the underlier return and the amount that we will pay on your notes, if any, at maturity. We will not do so until the trade date. As a result, the actual initial underlier level may differ substantially from the underlier level prior to the trade date and may be higher or lower than the actual closing price of the underlier on the trade date.

For these reasons, the actual performance of the underlier over the term of your notes, as well as the amount payable at maturity, if any, may bear little relation to the hypothetical examples shown below or to the historical underlier levels shown elsewhere in this pricing supplement. For information about the historical levels of the underlier during recent periods, see “The Underlier—Historical Performance of the Underlier” below. Before investing in the notes, you should consult publicly available information to determine the prices of the underlier between the date of this pricing supplement and the date of your purchase of the notes.

Also, the hypothetical examples shown below do not take into account the effects of applicable taxes. Because of the U.S. tax treatment applicable to your notes, tax liabilities could affect the after-tax rate of return on your notes to a comparatively greater extent than the after-tax return on the stocks held by the underlier (the “underlier stocks”). The levels in the left column of the table below represent hypothetical final underlier levels and are expressed as percentages of the initial underlier level. The amounts in the right column represent the hypothetical cash settlement

amounts, based on the corresponding hypothetical final underlier level (expressed as a percentage of the initial underlier level), and are expressed as percentages of the principal amount of a note (rounded to the nearest one-thousandth of a percent). Thus, a hypothetical cash settlement amount of 100.000% means that the value of the cash payment that we would deliver for each \$1,000 principal amount of the notes at maturity would equal the principal amount of a note, based on the corresponding hypothetical final underlier level (expressed as a percentage of the initial underlier level) and the assumptions noted above.

PS-4

---

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Hypothetical Final Underlier Level (as a Percentage of the Initial Underlier Level)	Hypothetical Cash Settlement Amount (as a Percentage of the Principal Amount)
150.00%	150.000%
140.00%	140.000%
130.00%	130.000%
124.84%	124.840%
120.00%	124.840%
110.00%	124.840%
105.00%	124.840%
100.00%	124.840%
97.00%	100.000%
95.00%	100.000%
90.00%	100.000%
80.00%	88.889%
75.00%	83.333%
50.00%	55.556%
25.00%	27.778%
0.00%	0.000%

If, for example, the final underlier level were determined to be 25.00% of the initial underlier level, the cash settlement amount that we would deliver on your notes at maturity would be approximately 27.778% of the principal amount of your notes, as shown in the hypothetical cash settlement amount column of the table above. As a result, if you purchased your notes at the principal amount on the settlement date and held them to maturity, you would lose approximately 72.222% of your investment.

PS-5

---



The following chart also illustrates the hypothetical cash settlement amounts (expressed as a percentage of the principal amount of your notes) that we would pay on your notes on the stated maturity date if the final underlier level (expressed as a percentage of the initial underlier level) were any of the hypothetical levels shown on the horizontal axis. The chart shows that any hypothetical final underlier level (expressed as a percentage of the initial underlier level) of less than the buffer level would result in a hypothetical cash settlement amount of less than 100.00% of the principal amount of your notes (the section below the 100.00% marker on the vertical axis) and, accordingly, in a loss of principal to the holder of the notes.

n The Note Performance

n The Underlier Performance

No one can predict what the final underlier level will be. The actual amount that a holder of the notes will receive at maturity and the actual return on your investment in the notes, if any, will depend on the initial underlier level, the stated maturity date and the threshold settlement amount that will be set on the trade date and the actual final underlier level determined by the calculation agent as described below. In addition, the actual return on your notes will further depend on the original issue price. Moreover, the assumptions on which the hypothetical table and chart are based may turn out to be inaccurate. Consequently, the return on your investment in the notes, if any, and the actual cash settlement amount to be paid in respect of the notes at maturity may be very different from the information reflected in the table and chart above.

PS-6

---

#### ADDITIONAL RISK FACTORS SPECIFIC TO YOUR NOTES

An investment in your notes is subject to the risks described below, as well as the risks described under “Risk Factors” beginning on page S-1 of the accompanying prospectus supplement and page 1 of the accompanying prospectus. You should carefully review these risks as well as the terms of the notes described herein and in the accompanying prospectus, dated January 8, 2016, as supplemented by the accompanying prospectus supplement, dated January 8, 2016, and the accompanying product prospectus supplement PB-1, dated January 14, 2016, of Royal Bank of Canada. Your notes are a riskier investment than ordinary debt securities. Also, your notes are not equivalent to investing directly in the underlier stocks, i.e., the stocks held by the underlier. You should carefully consider whether the offered notes are suited to your particular circumstances.

#### You May Lose Your Entire Investment in the Notes

The principal amount of your investment is not protected and you may lose a significant amount, or even all of your investment in the notes. The cash settlement amount, if any, will depend on the performance of the underlier and the change in the price of the underlier from the trade date to the determination date, and you may receive significantly less than the principal amount of the notes. Subject to our credit risk, you will receive at least the principal amount of the notes at maturity only if the final underlier level is greater than or equal to the buffer level. If the final underlier level is less than the buffer level, then you will lose, for each \$1,000 in principal amount of the notes, an amount equal to the product of (i) the buffer rate times (ii) the sum of underlier return plus the buffer amount (iii) times \$1,000. You could lose some or all of the principal amount. Thus, depending on the final underlier level, you could lose a substantial portion, and perhaps all, of your investment in the notes, which would include any premium to the principal amount you may have paid when you purchased the notes.

In addition, if the notes are not held until maturity, assuming no changes in market conditions or to our creditworthiness and other relevant factors, the price you may receive for the notes may be significantly less than the price that you paid for them.

#### Our Initial Estimated Value of the Notes Will Be Less than the Original Issue Price

Our initial estimated value that is set forth on the cover page of this document, and that will be set forth in the final pricing supplement for the notes, will be less than the original issue price of the notes, and does not represent a minimum price at which we, RBCCM or any of our other affiliates would be willing to purchase the notes in any secondary market (if any exists) at any time. This is due to, among other things, the fact that the original issue price of the notes reflects the borrowing rate we pay to issue securities of this kind (an internal funding rate that is lower than the rate at which we borrow funds by issuing conventional fixed rate debt), and the inclusion in the original issue price of the underwriting discount and costs relating to our hedging of the notes.

#### The Price, if Any, at Which You May Be Able to Sell Your Notes Prior to Maturity May Be Less than the Original Issue Price and Our Initial Estimated Value

Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your notes prior to maturity may be less than the original issue price and our initial estimated value. This is because any such sale price would not be expected to include the underwriting discount or our estimated profit and the costs relating to our hedging of the notes. In addition, any price at which you may sell the notes is likely to reflect customary bid-ask spreads for similar trades, and the cost of unwinding any related hedge transactions. In addition, the value of the notes determined for any secondary market price is expected to be based in part on the yield that is reflected in the interest rate on our conventional debt securities of similar maturity that are traded in the secondary market, rather than the internal funding rate that we used to price the notes and determine the initial estimated value. As a result, the secondary market price of the notes will be less than if the internal funding rate was used. These factors, together with various credit, market and economic factors over the term of the notes, and, potentially, changes in the price of the underlier, are expected to reduce the price at which you may be able to sell the notes in any secondary market and will affect the value of the notes in complex and unpredictable ways.

As set forth below in the section “Supplemental Plan of Distribution (Conflicts of Interest),” for a limited period of time after the trade date, your broker may repurchase the notes at a price that is greater than the estimated value of the notes at that time. However, assuming no changes in any other relevant factors, the price you may receive if you sell your notes is expected to decline gradually during that period.

The notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your notes to maturity.

The Initial Estimated Value of the Notes Is an Estimate Only, Calculated as of the Time the Terms of the Notes Are Set

Our initial estimated value of the notes is based on the value of our obligation to make the payments on the notes, together with the mid-market value of the derivative embedded in the terms of the notes. See “Structuring the Notes” below. Our estimate is based on a variety of assumptions, including our internal funding rate (which represents a discount from our credit spreads), expectations as to dividends on the underlier stocks, interest rates and volatility, and the expected term of the notes. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities may value the notes or similar securities at a price that is significantly different than we do.

The value of the notes at any time after the trade date will vary based on many factors, including changes in market conditions, and cannot be predicted with accuracy. As a result, the actual value you would receive if you sold the notes in any secondary market, if any, should be expected to differ materially from our initial estimated value of your notes.

PS-7

---

#### Your Notes Will Not Bear Interest

You will not receive any interest payments on the notes. Even if the amount payable on the notes at maturity exceeds the principal amount of the notes, the overall return you earn on the notes may be less than you would otherwise have earned by investing in a non-indexed debt security of comparable maturity that bears interest at a prevailing market rate. Your investment may not reflect the full opportunity cost to you when you take into account factors that affect the time value of money.

#### Payment of the Amount Payable on Your Notes Is Subject to Our Credit Risk, and Market Perceptions About Our Creditworthiness May Adversely Affect the Market Value of Your Notes

The notes are our unsecured debt obligations. Investors are subject to our credit risk, and market perceptions about our creditworthiness may adversely affect the market value of the notes. Any decrease in the market's view on or confidence in our creditworthiness is likely to adversely affect the market value of the notes.

#### The Amount Payable on Your Notes Is Not Linked to the Price of the Underlier at Any Time Other than the Determination Date

The amount payable on your notes will be based on the final underlier level. Therefore, for example, if the price of the underlier decreased precipitously on the determination date, the amount payable at maturity may be significantly less than it would otherwise have been had the amount payable been linked to the price of the underlier prior to that decrease. Although the actual price of the underlier at maturity or at other times during the term of the notes may be higher than the final underlier level, you will not benefit from the price of the underlier at any time other than the determination date.

#### The Notes May Not Have an Active Trading Market

The notes will not be listed on any securities exchange. The dealer intends to offer to purchase the notes in the secondary market, but is not required to do so. The dealer or any of its affiliates may stop any market-making activities at any time. Even if there is a secondary market, it may not provide enough liquidity to allow you to easily trade or sell the notes. Because other dealers are not likely to make a secondary market for the notes, the price at which you may be able to trade the notes is likely to depend on the price, if any, at which the dealer is willing to buy the notes. We expect that transaction costs in any secondary market would be high. As a result, the difference between bid and asked prices for your notes in any secondary market could be substantial.

If you sell your notes before maturity, you may have to do so at a substantial discount from the price that you paid for them, and as a result, you may suffer substantial losses.

#### The Market Value of Your Notes May Be Influenced by Many Unpredictable Factors

The following factors, among others, many of which are beyond our control, may influence the market value of your notes:

- the price of the underlier;
- the volatility—i.e., the frequency and magnitude of changes—of the price of the underlier;
- the dividend rates of the underlier stocks;
- economic, financial, regulatory, political, military and other events that affect stock markets generally and the underlier stocks;
- interest and yield rates in the market;
- the time remaining until the notes mature; and
- our creditworthiness, whether actual or perceived, and including actual or anticipated upgrades or downgrades in our credit ratings or changes in other credit measures.

These factors may influence the market value of your notes if you sell your notes before maturity, including the price you may receive for your notes in any market making transaction. If you sell your notes prior to maturity, you may receive less than the principal amount of your notes.

#### If the Price of the Underlier or the Underlier Stocks Changes, the Market Value of the Notes May Not Change in the Same Manner

The notes may trade quite differently from the performance of the underlier or the underlier stocks. Changes in the price of the underlier or the underlier stocks may not result in a comparable change in the market value of the notes. Some of the reasons for this disparity are discussed under “—The Market Value of Your Notes May Be Influenced by Many Unpredictable Factors” above.

**The Return on the Notes Will Not Reflect Any Dividends Paid on the Underlier or the Underlier Stocks**

You will not receive any dividends that may be paid on the underlier, or that may be paid on any of the underlier stocks. See “You Have No Shareholder Rights or Rights to Receive Any Shares of the Underlier or Any Underlier Stocks” below for additional information. Therefore, the return on the notes will not reflect the return you would realize if you actually owned shares of the underlier or the underlier stocks and received the dividends paid on those securities.

**You Have No Shareholder Rights or Rights to Receive Any Shares of the Underlier or Any Underlier Stocks**

Investing in your notes will not make you a holder of shares of the underlier, any of the underlier stocks or any of the stocks underlying the index. Neither you nor any other holder or owner of your notes will have any voting rights, any right to receive dividends or other distributions, any rights to make a claim against the issuers of those securities or any other

PS-8

---

rights with respect to those securities. Your notes will be paid in cash to the extent any amount is payable at maturity, and you will have no right to receive delivery of any of those securities.

**We Will Not Hold Any Shares of the Underlier or the Underlier Stocks for Your Benefit, if We Hold Them at All**

The indenture and the terms governing your notes do not contain any restriction on our ability or the ability of any of our affiliates to sell, pledge or otherwise convey all or any portion of the shares of the underlier or the underlier stocks that we or they may acquire. Neither we nor our affiliates will pledge or otherwise hold any assets for your benefit, including any of these securities. Consequently, in the event of our bankruptcy, insolvency or liquidation, any of those securities that we own will be subject to the claims of our creditors generally and will not be available for your benefit specifically.

**Our Hedging Activities and/or Those of Our Distributors May Negatively Impact Investors in the Notes and Cause Our Interests and Those of Our Clients and Counterparties to Be Contrary to Those of Investors in the Notes**

The dealer or one or more of our other affiliates and/or distributors expects to hedge its obligations under the hedging transaction that it may enter into with us by purchasing futures and/or other instruments linked to the underlier, the underlier stocks or the securities included in the index. The dealer or one or more of our other affiliates and/or distributors also expects to adjust the hedge by, among other things, purchasing or selling any of the foregoing, and perhaps other instruments linked to these securities at any time and from time to time, and to unwind the hedge by selling any of the foregoing on or before the determination date.

We, the dealer, or one or more of our other affiliates and/or distributors may also enter into, adjust and unwind hedging transactions relating to other notes whose returns are linked to changes in the price of the underlier or the underlier stocks or the index. Any of these hedging activities may adversely affect the price of the underlier—directly or indirectly by affecting the price of the underlier stocks—and therefore the market value of the notes and the amount you will receive, if any, on the notes. In addition, you should expect that these transactions will cause us, the dealer or our other affiliates and/or distributors, or our clients or counterparties, to have economic interests and incentives that do not align with, and that may be directly contrary to, those of an investor in the notes. We, the dealer and our other affiliates and/or distributors will have no obligation to take, refrain from taking or cease taking any action with respect to these transactions based on the potential effect on an investor in the notes, and may receive substantial returns with respect to these hedging activities while the value of the notes may decline. Additionally, if the distributor from which you purchase notes is to conduct hedging activities for us in connection with the notes, that distributor may profit in connection with such hedging activities and such profit, if any, will be in addition to the compensation that the distributor receives for the sale of the notes to you. You should be aware that the potential to earn fees in connection with hedging activities may create a further incentive for the distributor to sell the notes to you in addition to the compensation they would receive for the sale of the notes.

**Market Activities by Us and by the Dealer for Our Own Account or for Our Clients Could Negatively Impact Investors in the Notes**

We, the dealer and our other affiliates provide a wide range of financial services to a substantial and diversified client base. As such, we each may act as an investor, investment banker, research provider, investment manager, investment advisor, market maker, trader, prime broker or lender. In those and other capacities, we, the dealer and/or our other affiliates purchase, sell or hold a broad array of investments, actively trade securities (including the notes or other securities that we have issued), shares of the underlier, the underlier stocks, derivatives, loans, credit default swaps, indices, baskets and other financial instruments and products for our own accounts or for the accounts of our customers, and we will have other direct or indirect interests, in those securities and in other markets that may be not be consistent with your interests and may adversely affect the price of the underlier and/or the value of the notes. Any of these financial market activities may, individually or in the aggregate, have an adverse effect on the price of the underlier and the market value of your notes, and you should expect that our interests and those of the dealer and/or our other affiliates, or our clients or counterparties, will at times be adverse to those of investors in the notes.

In addition to entering into these transactions itself, we, the dealer and our other affiliates may structure these transactions for our clients or counterparties, or otherwise advise or assist clients or counterparties in entering into these transactions. These activities may be undertaken to achieve a variety of objectives, including: permitting other purchasers of the notes or other securities to hedge their investment in whole or in part; facilitating transactions for other clients or counterparties that may have business objectives or investment strategies that are inconsistent with or contrary to those of investors in the notes; hedging the exposure of us, the dealer or our other affiliates in connection

with the notes, through their market-making activities, as a swap counterparty or otherwise; enabling us, the dealer or our other affiliates to comply with internal risk limits or otherwise manage firmwide, business unit or product risk; and/or enabling us, the dealer or our other affiliates to take directional views as to relevant markets on behalf of itself or our clients or counterparties that are inconsistent with or contrary to the views and objectives of investors in the notes.

We, the dealer and our other affiliates regularly offer a wide array of securities, financial instruments and other products into the marketplace, including existing or new products that are similar to the notes or other securities that we may issue, shares of the underlier, the underlier stocks or other securities or instruments similar to or linked to the foregoing. Investors in the notes should expect that we, the dealer and our other affiliates will offer securities, financial instruments, and other products that may compete with the notes for liquidity or otherwise.

We, the Dealer and Our Other Affiliates Regularly Provide Services to, or Otherwise Have Business Relationships with, a Broad Client Base, Which Has Included and May Include Us and the Issuers of the Underlier Stocks

We, the dealer and our other affiliates regularly provide financial advisory, investment advisory and transactional services to a substantial and diversified client base. You should assume that we or they will, at present or in the future, provide such services or otherwise engage in transactions with, among others, us and the issuers of the underlier stocks, or transact in securities or instruments or with parties that are directly or indirectly related to these entities.

These services could include making loans to or equity investments in those companies, providing financial advisory or other investment banking services, or issuing research reports. You should expect that we, the dealer and our other affiliates, in providing

PS-9

---

these services, engaging in such transactions, or acting for our own accounts, may take actions that have direct or indirect effects on the notes or other securities that we may issue, the underlier, the underlier stocks or other securities or instruments similar to or linked to the foregoing, and that such actions could be adverse to the interests of investors in the notes. In addition, in connection with these activities, certain personnel within us, the dealer or our other affiliates may have access to confidential material non-public information about these parties that would not be disclosed to investors of the notes.

#### Past Underlier Performance Is No Guide to Future Performance

The actual performance of the underlier over the term of the notes may bear little relation to the historical levels of the underlier. Likewise, the amount payable at maturity may bear little relationship to the hypothetical return table or chart set forth elsewhere in this pricing supplement. We cannot predict the future performance of the underlier. Trading activities undertaken by market participants, including certain investors in the notes or their affiliates, including in short positions and derivative positions, may adversely affect the price of the underlier.

#### As the Calculation Agent, RBCCM Will Have the Authority to Make Determinations that Could Affect the Amount You Receive, if Any, at Maturity

As the calculation agent for the notes, RBCCM will have discretion in making various determinations that affect the notes, including determining the final underlier level, and specifically whether and how to make anti-dilution adjustments to the final underlier level, which will be used to determine the cash settlement amount at maturity, and determining whether to postpone the determination date because of a market disruption event or because that day is not a trading day. The calculation agent also has discretion in making certain adjustments relating to a discontinuation or modification of the underlier, as described under “General Terms of the Notes—Unavailability of the Level of the Underlier” on page PS-6 of the accompanying product prospectus supplement PB-1 and under “General Terms of the Notes—Anti-dilution Adjustments for Exchange Traded Funds” on page PS-9 of the accompanying product prospectus supplement PB-1. The exercise of this discretion by RBCCM, which is our wholly owned subsidiary, could adversely affect the value of the notes and may create a conflict of interest between you and RBCCM. For a description of market disruption events as well as the consequences of the market disruption events, see the section entitled “General Terms of the Notes—Market Disruption Events” beginning on page PS-7 of the accompanying product prospectus supplement PB-1. We may change the calculation agent at any time without notice, and RBCCM may resign as calculation agent at any time.

#### The Policies of the Underlier’s Investment Advisor, BlackRock Fund Advisors, and S&P Dow Jones Indices LLC, the Sponsor of the Index, Could Affect the Amount Payable on the Notes, if Any, and Their Market Value

The underlier’s investment advisor, BlackRock Fund Advisors, Inc. (“BFA,” or the “investment advisor”) may from time to time make certain decisions or judgments with respect to the implementation of policies concerning the calculation of the net asset value of the underlier, additions, deletions or substitutions of the underlier stocks, and the manner in which changes affecting the index are reflected in the underlier. These decisions or judgments could affect the market price of the shares of the underlier and, therefore, the amount payable on the notes, if any, at maturity and the market value of the notes prior to maturity. The amount payable on the notes, if any, and their market value could also be affected if the investment advisor discontinues or suspends calculation or publication of the net asset value of the underlier, in which case it may become difficult to determine the market value of the notes. If events such as these occur, the calculation agent will determine the amount payable, if any, at maturity as described herein and in the product prospectus supplement.

In addition, the index sponsor publishes the index and is responsible for the design and maintenance of the index. The policies of the index sponsor concerning the calculation of the index, including decisions regarding the addition, deletion or substitution of the securities included in the index, could affect the market prices of shares of the underlier and, therefore, the amount payable on your notes and their market value.

#### There Are Risks Associated with the Underlier

Although the underlier’s shares are listed for trading on NYSE Arca, Inc. (the “NYSE Arca”) and a number of similar products have been traded on the NYSE Arca or other securities exchanges for varying periods of time, there is no assurance that an active trading market will continue for the shares of the underlier or that there will be liquidity in the trading market.

In addition, the underlier is subject to management risk, which is the risk that the investment advisor’s investment strategy, the implementation of which is subject to a number of constraints, may not produce the intended results. For



example, the investment advisor may select up to 10% of the underlier's assets to be invested in shares of equity securities that are not included in the index. The underlier is also not actively managed and may be affected by a general decline in market segments relating to the index. The investment advisor invests in securities included in, or representative of, the index regardless of their investment merits. The investment advisor does not attempt to take defensive positions in declining markets.

In addition, the underlier is subject to custody risk, which refers to the risks in the process of clearing and settling trades and to the holding of securities by local banks, agent and depositories.

The Underlier and the Index are Different and the Performance of the Underlier May Not Correlate with the Performance of the Index

The underlier uses a representative sampling strategy (more fully described under "The Underlier") to attempt to track the performance of the index. The underlier may not hold all or substantially all of the equity securities included in the index and may hold securities or assets not included in the index. Therefore, while the performance of the underlier is generally linked to the performance of the index, the performance of the underlier is also linked in part to shares of equity securities not included in the index and to the performance of other assets, such as futures contracts, options and swaps, as well as cash and cash equivalents, including shares of money market funds affiliated with the underlier's investment advisor.

PS-10

---

Imperfect correlation between the underlier's portfolio securities and those in the index, rounding of prices, changes to the index and regulatory requirements may cause tracking error, which is the divergence of the underlier's performance from that of the index.

In addition, the performance of the underlier will reflect additional transaction costs and fees that are not included in the calculation of the index; this may increase the tracking error of the underlier. Also, corporate actions with respect to the sample of equity securities (such as mergers and spin-offs) may impact the performance differential between the underlier and the index. Finally, because the shares of the underlier are traded on the NYSE Arca and are subject to market supply and investor demand, the market value of one share of the underlier may differ from the net asset value per share of the underlier.

For all of the foregoing reasons, the performance of the underlier may not correlate with the performance of the index. Consequently, the return on the notes will not be the same as investing directly in the underlier, the index or the underlier stocks, and will not be the same as investing in a debt security with a payment at maturity linked to the performance of the index.

#### The Underlier is Concentrated in the Real Estate Industry and Does Not Provide Diversified Exposure

The underlier is not diversified. The underlier invests in shares of companies that directly or indirectly invest in real estate. The performance of the real estate industry is affected by multiple factors, including general economic and political conditions, the availability of financing for real estate, governmental actions that affect real estate, liquidity in the real estate market and interest rates. The value of shares of companies that invest in real estate and the performance of the underlier will be negatively affected by a downturn in the real estate industry and may remain flat or decrease in periods of low growth. In addition, real estate markets tend to be local or regional, and an increase in one area may not offset a downturn in another area. Further, the underlier invests in real estate investment trusts, the performance of which is subject to concentration and management risks similar to those to which the underlier is subject.

#### The Calculation Agent Can Postpone the Determination of the Final Underlier Level if a Market Disruption Event Occurs or Is Continuing

The determination of the final level may be postponed if the calculation agent determines that a market disruption event has occurred or is continuing on the determination date with respect to the underlier. If such a postponement occurs, the calculation agent will use the closing price of the underlier on the first subsequent trading day on which no market disruption event occurs or is continuing, subject to the limitations set forth in the accompanying product prospectus supplement PB-1. If a market disruption event occurs or is continuing on a determination date, the stated maturity date for the notes could also be postponed.

If the determination of the price of the underlier for any determination date is postponed to the last possible day, but a market disruption event occurs or is continuing on that day, that day will nevertheless be the date on which the price of the underlier will be determined by the calculation agent. In such an event, the calculation agent will make a good faith estimate in its sole discretion of the price that would have prevailed in the absence of the market disruption event. See "General Terms of the Notes—Market Disruption Events" in the accompanying product prospectus supplement PB-1.

#### There Is No Affiliation Between the Underlier Stock Issuers or the Underlier's Investment Advisor and Us or the Dealer, and Neither We Nor the Dealer Is Responsible for Any Disclosure by Any of the Underlier Stock Issuers or the Underlier's Investment Advisor

We are not affiliated with the issuers of the underlier stocks or with the sponsor of the underlier. As discussed herein, however, we, the dealer, and our other affiliates may currently, or from time to time in the future, engage in business with the issuers of the underlier stocks. Nevertheless, none of us, the dealer, or our respective affiliates assumes any responsibility for the accuracy or the completeness of any information about the underlier or any of the underlier stocks. You, as an investor in the notes, should make your own investigation into the underlier and the underlier stocks. See the section below entitled "The Underlier" for additional information about the underlier.

None of the underlier's investment advisor, any of the underlier stock issuers or the index sponsor is involved in this offering of the notes in any way, and none of them have any obligation of any sort with respect to the notes. Thus, none of the underlier's investment advisor, any of the issuers of the underlier stocks, or the index sponsor has any obligation to take your interests into consideration for any reason, including in taking any corporate actions that might affect the value of the notes.

**You Have Limited Anti-Dilution Protection**

The calculation agent may adjust the final underlier level to reflect certain corporate actions by the underlier, as described in the section “Description of the Notes — Anti-dilution Adjustments for Exchange Traded Funds” in the accompanying product prospectus supplement PB-1. The calculation agent will not be required to make an adjustment for every event that may affect the underlier and will have broad discretion to determine whether and to what extent an adjustment is required.

**You Must Rely on Your Own Evaluation of the Merits of an Investment Linked to the Underlier**

In the ordinary course of business, we, the dealer, our other affiliates and any additional dealers, including in acting as a research provider, investment advisor, market maker, principal investor or distributor, may express research or investment views on expected movements in the underlier, the index or the underlier stocks, and may do so in the future. These views or reports may be communicated to our clients, clients of our affiliates and clients of any additional dealers, and may be inconsistent with, or adverse to, the objectives of investors in the notes. However, these views are subject to change from time to time. Moreover, other professionals who transact business in markets relating to the underlier, the index or the underlier stocks may at any time have significantly different views from those of these entities. For these reasons, you are

PS-11

---

encouraged to derive information concerning the underlier, the index or the underlier stocks from multiple sources, and you should not rely solely on views expressed by us, the dealer, our other affiliates, or any additional dealers.

#### We May Sell an Additional Aggregate Amount of the Notes at a Different Original Issue Price

At our sole option, we may decide to sell an additional aggregate amount of the notes subsequent to the trade date. The price of the notes in the subsequent sale may differ substantially (higher or lower) from the principal amount. If the Original Issue Price for Your Notes Represents a Premium to the Principal Amount, the Return on Your Notes Will Be Lower Than the Return on Notes for Which the Original Issue Price Is Equal to the Principal Amount or Represents a Discount to the Principal Amount

The cash settlement amount will not be adjusted based on the original issue price. If the original issue price for your notes differs from the principal amount, the return on your notes held to maturity will differ from, and may be substantially less than, the return on notes for which the original issue price is equal to the principal amount. If the original issue price for your notes represents a premium to the principal amount and you hold them to maturity, the return on your notes will be lower than the return on notes for which the original issue price is equal to the principal amount or represents a discount to the principal amount.

In addition, the impact of the buffer level on the return on your investment will depend upon the price you pay for your notes relative to the principal amount. For example, if you purchase your notes at a premium to the principal amount, the buffer level, while still providing some protection for the return on the notes, will allow a greater percentage decrease in your investment in the notes than would have been the case for notes purchased at the principal amount or a discount to the principal amount.

#### Significant Aspects of the Income Tax Treatment of an Investment in the Notes Are Uncertain

The tax treatment of an investment in the notes is uncertain. We do not plan to request a ruling from the Internal Revenue Service or the Canada Revenue Agency regarding the tax treatment of an investment in the notes, and the Internal Revenue Service, the Canada Revenue Agency or a court may not agree with the tax treatment described in this pricing supplement.

The Internal Revenue Service has issued a notice indicating that it and the U.S. Treasury Department are actively considering whether, among other issues, a holder should be required to accrue interest over the term of an instrument such as the notes even though that holder will not receive any payments with respect to the notes until maturity or earlier sale or exchange and whether all or part of the gain a holder may recognize upon sale, exchange or maturity of an instrument such as the notes could be treated as ordinary income. The outcome of this process is uncertain and could apply on a retroactive basis.

Please read carefully the section entitled “Supplemental Discussion of U.S. Federal Income Tax Consequences” in the accompanying product prospectus supplement PB-1, the section entitled “Certain Income Tax Consequences” in the accompanying prospectus supplement and the section entitled “Tax Consequences” in the accompanying prospectus.

You should consult your tax advisor about your own tax situation.

#### Non-U.S. Investors May Be Subject to Certain Additional Risks

The notes will be denominated in U.S. dollars. If you are a non-U.S. investor who purchases the notes with a currency other than U.S. dollars, changes in rates of exchange may have an adverse effect on the value, price or returns of your investment.

This pricing supplement contains a general description of certain U.S. tax considerations relating to the notes. If you are a non-U.S. investor, you should consult your tax advisors as to the consequences, under the tax laws of the country where you are resident for tax purposes, of acquiring, holding and disposing of the notes and receiving the payments that might be due under the notes.

For a discussion of certain Canadian federal income tax consequences of investing in the notes, please see the section entitled “Tax Consequences — Canadian Taxation” in the accompanying prospectus. If you are not a Non-resident Holder (as that term is defined in “Tax Consequences — Canadian Taxation” in the accompanying prospectus) or if you acquire the notes in the secondary market, you should consult your tax advisor as to the consequences of acquiring, holding and disposing of the notes and receiving the payments that might be due under the notes.

#### Certain Considerations for Insurance Companies and Employee Benefit Plans

Any insurance company or fiduciary of a pension plan or other employee benefit plan that is subject to the prohibited transaction rules of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”), or the Internal Revenue Code of 1986, as amended (the “Internal Revenue Code”), including an IRA or a Keogh plan (or a

governmental plan to which similar prohibitions apply), and that is considering purchasing the notes with the assets of the insurance company or the assets of such a plan, should consult with its counsel regarding whether the purchase or holding of the notes could become a “prohibited transaction” under ERISA, the Internal Revenue Code or any substantially similar prohibition in light of the representations a purchaser or holder in any of the above categories is deemed to make by purchasing and holding the notes. This is discussed in more detail under “Employee Retirement Income Security Act” in the accompanying product prospectus supplement PB-1.

PS-12

---

## THE UNDERLIER

## The iShares® U.S. Real Estate ETF

The shares of the underlier are issued by iShares, Inc., a registered investment company. The underlier seeks investment results that correspond generally to the price and yield performance, before fees and expenses, of the index. The underlier trades on the NYSE Arca under the ticker symbol “IYR.” BlackRock Fund Advisors (“BFA”) serves as the investment advisor to the underlier.

We obtained the following fee information from the iShares® website, without independent verification. The investment advisor is entitled to receive a management fee from the underlier corresponding to the underlier’s allocable portion of an aggregate management fee based on the aggregate average daily net assets of the underlier and a set of other iShares® funds (the “funds”) as follows: 0.48% per annum of the aggregate net assets of the combined funds less than or equal to \$10.0 billion; plus 0.43% per annum of the aggregate net assets of the combined funds over \$10.0 billion, up to and including \$20.0 billion; plus 0.38% per annum of the aggregate net assets of the combined funds in excess of \$20.0 billion, up to and including \$30.0 billion; plus 0.34% per annum of the aggregate net assets of the combined funds in excess of \$30.0 billion, up to and including \$40.0 billion; plus 0.33% per annum of the aggregate net assets of the combined funds in excess of \$40.0 billion, up to and including \$50.0 billion; plus 0.31% per annum of the aggregate net assets of the combined funds in excess of \$50.0 billion. As of September 30, 2017, the expense ratio of the underlier was 0.44%.

The following tables display the top holdings and weightings by industry sector of the underlier. (Sector designations are determined by the underlier sponsor using criteria it has selected or developed. Index and underlier sponsors may use very different standards for determining sector designations. In addition, many companies operate in a number of sectors, but are listed in only one sector and the basis on which that sector is selected may also differ. As a result, sector comparisons between indices or ETFs with different sponsors may reflect differences in methodology as well as actual differences in the sector composition of the indices or ETFs.) We obtained the information in the tables below from the underlier’s website without independent verification.

## iShares® U.S. Real Estate ETF Top Ten Holdings as of October 23, 2017

<u>ETF Stock Issuer</u>	<u>Percentage (%)</u>
AMERICAN TOWER REIT CORP	5.74%
SIMON PROPERTY GROUP REIT INC	4.96%
CROWN CASTLE INTERNATIONAL REIT CO	4.07%
EQUINIX REIT INC	3.45%
PROLOGIS REIT INC	3.31%
PUBLIC STORAGE REIT	3.10%
WEYERHAEUSER REIT	2.53%
AVALONBAY COMMUNITIES REIT INC	2.42%
WELLTOWER INC	2.40%
DIGITAL REALTY TRUST REIT INC	2.37%
Total	34.35%

## iShares® U.S. Real Estate ETF by Sector as of October 23, 2017\*

<u>Sector</u>	<u>Percentage (%)</u>
SPECIALIZED REITS	30.39%
RETAIL REITS	13.90%

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

RESIDENTIAL REITS	13.29%
OFFICE REITS	10.10%
HEALTH CARE REITS	9.32%
INDUSTRIAL REITS	5.49%
DIVERSIFIED REITS	5.31%
MORTGAGE REITS	4.75%
HOTEL & RESORT REITS	4.62%
REAL ESTATE SERVICES	2.16%
REAL ESTATE DEVELOPMENT	0.47%
CASH AND/OR DERIVATIVES	0.20%
Total	100.00%

\* Percentages may not sum to 100% due to rounding.

PS-13

---

For additional information regarding iShares Inc., BFA, the underlier and the risk factors attributable to the underlier, please see the Prospectus, as amended to date, filed as part of the Registration Statement on Form N-1A with the SEC under the Securities Act of 1933, as amended, and under the Investment Company Act of 1940, as amended.

Information provided to or filed with the SEC can be inspected and copied at the public reference facilities maintained by the SEC or through the SEC's website at [www.sec.gov](http://www.sec.gov). In addition, information regarding the underlier, including its top portfolio holdings, may be obtained from other sources including, but not limited to, press releases, newspaper articles, other publicly available documents, and the iShares® website at [www.ishares.com](http://www.ishares.com). We are not incorporating by reference the website or any material it includes in this pricing supplement. Neither we nor the dealer makes any representation or warranty as to the accuracy or completeness of any such material.

#### Investment Objective and Strategy

The underlier seeks to provide investment results that correspond generally to the price and yield performance, before fees and expenses, of the index. The underlier's investment objective and the index may be changed at any time without shareholder approval. Notwithstanding the underlier's investment objective, the return on your notes will not reflect any dividends paid on the underlier shares, on the securities purchased by the underlier or on the securities that comprise the index.

The return on your notes is linked to the performance of the iShares® U.S. Real Estate ETF, and not to the performance of the Dow Jones U.S. Real Estate Index<sup>SM</sup> on which the underlier is based. Although the underlier seeks results that correspond generally to the performance of the index, the underlier follows a strategy of "representative sampling," which means the underlier's holdings do not identically correspond to the holdings and weightings of the index, and may significantly diverge from the index. Although the underlier generally invests at least 90% of its assets in some of the same securities as those contained in the index and in depositary receipts representing the same securities as those contained in the index, it does not hold all of the securities underlying the index and may invest the remainder in securities that are not contained in the index, or in other types of investments. Currently, the underlier holds substantially fewer securities than the index. Additionally, when the underlier purchases securities not held by the index, the underlier may be exposed to additional risks, such as counterparty credit risk or liquidity risk, to which the index components are not exposed. Therefore, the underlier will not directly track the performance of the index and there may be significant variation between the performance of the underlier and the index on which it is based.

#### Representative Sampling

BFA uses a representative sampling strategy to track the index. Representative sampling is an indexing strategy that involves investing in a representative sample of securities that collectively has an investment profile similar to the index. The securities selected are expected to have, in the aggregate, investment characteristics (based on factors such as market capitalization and industry weightings), fundamental characteristics (such as return variability and yield) and liquidity measures similar to those of the index. Funds may or may not hold all of the securities that are included in the index.

#### Correlation

The index is a theoretical financial calculation, while the underlier is an actual investment portfolio. The performance of the underlier and the index will vary somewhat due to transaction costs, foreign currency valuations, asset valuations, corporate actions (such as mergers and spin-offs), timing variances and differences between the underlier's portfolio and the index resulting from legal restrictions (such as diversification requirements that apply to the underlier but not to the index) or representative sampling. A figure of 100% would indicate perfect correlation. Any correlation of less than 100% is called "tracking error." The underlier, using representative sampling, can be expected to have a greater tracking error than an underlier using a replication indexing strategy. "Replication" is a strategy in which a fund invests in substantially all of the securities in the index in approximately the same proportions as in the index. Additional information can be found on the iShares® website provided above, which compares performance information for the market value return of the underlier's shares and the underlier return for various periods.

#### Industry Concentration Policy

The underlier will not concentrate its investments (i.e., hold 25% or more of its total assets in the stocks of a particular industry or group of industries), except that, to the extent practicable, the underlier will concentrate its investments to approximately the same extent that the index concentrates in the stocks of such particular industry or group of industries.





### The Dow Jones U.S. Real Estate Index<sup>SM</sup>

The information below is included only to give insight to the index, the performance of which the underlier attempts to reflect. The notes are linked to the performance of the underlier and not to the index.

The index is a float-adjusted market capitalization-weighted real-time index that provides a broad measure of the performance of the real estate sector of the U.S. securities market. Component companies consist of REITs, and other companies that invest directly or indirectly in real estate through development, management, or ownership, including property agencies. Because the index is comprised primarily of REITs, the prices of the component stocks reflect changes in lease rates, vacancies, property development and other transactions. The index was first calculated on February 14, 2000. The level of the index was set to 100 on the base date of December 31, 1991.

The index is a subset of the Dow Jones U.S. Index<sup>SM</sup>, a broad-based measure of the U.S. stock market, which aims to measure the performance of 95% of U.S. stocks by float-adjusted market capitalization and is calculated on a price return basis. The index universe is defined as all stocks traded on the major U.S. stock exchanges, minus any non-common issues and illiquid stocks. The Dow Jones U.S. Index<sup>SM</sup> is part of the Dow Jones Global Indices<sup>®</sup>, which is a benchmark family of indices that currently follows stocks from a variety of countries.

### Index Calculation

The index level is calculated using a fraction, the numerator of which is the price of each stock in the index multiplied by the number of shares used in the index calculation (total shares outstanding times the IWF), and summed across all the stocks in the index. The IWF is the investable weight factor, which is the available float shares (total shares outstanding less shares held by control holders) divided by the total shares outstanding. The denominator is the index divisor.

To assure that the index's value, or level, does not change when stocks are added or deleted, the divisor is adjusted to offset the change in market value of the index. Thus, the divisor plays a critical role in the index's ability to provide a continuous measure of market valuation when faced with changes to the stocks included in the index. In a similar manner, some corporate actions that cause changes in the market value of the stocks in an index should not be reflected in the index level. Adjustments are made to the divisor to eliminate the impact of these corporate actions. Any change to the stocks in the index that alters the total market value of the index while holding stock prices constant will require a divisor adjustment. Corporate actions which require an adjustment to the divisor include: a company being added or deleted from the index; a change in shares outstanding; stock splits; spin-offs where the spun off company is not added to the index or where the spun off company is added but another company is removed; changes in IWF; special dividends; and rights offerings.

### Index Composition and Maintenance

**Defining the Investable Universe:** The index component candidates must trade on a major U.S. stock exchange and must be common shares or other securities that have the characteristics of common equities. All classes of common shares, both fully and partially paid, are eligible. Fixed-dividend shares and securities such as convertible notes, warrants, rights, mutual funds, unit investment trusts, closed-end fund shares, and shares in limited partnerships are not eligible. Temporary issues arising from corporate actions, such as "when-issued shares," are considered on a case-by-case basis when necessary to maintain continuity in a company's index membership. REITs, listed property trusts (LPTs), and similar real-property-owning pass-through structures taxed as REITs by their domiciles are also eligible. If a company has more than one class of shares, only one class of shares will be included. Securities that have had more than ten non-trading days during the past quarter are excluded.

**Stock Selection:** The index universe is sorted by float-adjusted market capitalization and the stocks in the top 95% are selected as components of the index, excluding stocks that fall within the bottom 1% of the universe according to their free-float market capitalization and within the bottom .01% of the universe according to their turnover. To be included in the index, the issuer of each component security must be classified in the Real Estate Supersector, as defined by the proprietary classification system used by S&P Dow Jones Indices LLC.

**Review Process:** The index is reconstituted annually in September. All index components are reviewed to determine their eligibility, and the float factor for each component is reviewed and updated as needed. Changes are implemented at the opening of trading on the Monday following the third Friday of September.

The index is also reviewed on a quarterly basis. Shares outstanding totals for component stocks are updated during each quarterly review. Changes in shares outstanding of less than 5% are accumulated and made quarterly in March, June, September and December. These changes, as well as any weight adjustments, are implemented at the opening

of trading on the Monday following the third Friday of the quarterly update month. If the number of outstanding shares for an index component changes by more than 5% due to a corporate action, the shares total will be adjusted. The timing of the adjustment will depend on the type of event that causes the change. If the impact of corporate actions during the period between quarterly share updates changes the number of a company's shares outstanding by 5% or more, and that change causes a company's float factor to change by 5% or more, then the company's float factor will be updated at the same time as the share change. If a component no longer meets the eligibility requirements, it will be removed from the index. Whenever possible, any such change will be announced at least two business days prior to its implementation.

In addition to the scheduled quarterly reviews, the index is reviewed on an ongoing basis. Changes in the index's composition and related weight adjustments are necessary whenever there are extraordinary events such as delistings, bankruptcies, mergers, or takeovers involving index components. In these cases, each event will be taken into account as soon as it is effective. Whenever possible, the changes in the index components will be announced at least two business days prior to their implementation date.

PS-15

---

#### Historical Performance of the Underlier

The price of the underlier has fluctuated in the past and may experience significant fluctuations in the future. Any historical upward or downward trend in the price of the underlier during any period shown below is not an indication that the underlier is more or less likely to increase or decrease at any time during the term of the notes.

The historical levels of the underlier are provided for informational purposes only. You should not take the historical levels of the underlier as an indication of its future performance. We cannot give you any assurance that the future performance of the underlier or the underlier stocks will result in your receiving an amount greater than the original issue price at maturity. Neither we nor any of our affiliates makes any representation to you as to the performance of the underlier. Moreover, in light of current market conditions, the trends reflected in the historical performance of the underlier may be less likely to be indicative of the performance of the underlier over the term of the notes than would otherwise have been the case. The actual performance of the underlier over the term of the notes, as well as the cash settlement amount, may bear little relation to the historical levels shown below.

The graph below shows the daily historical closing prices of the underlier from October 27, 2007 through October 27, 2017. We obtained the closing prices of the underlier listed in the graph below from Bloomberg Financial Services, without independent verification.

Historical Performance of the iShares® U.S. Real Estate ETF

PS-16

---

## SUPPLEMENTAL DISCUSSION OF U.S. FEDERAL INCOME TAX CONSEQUENCES

The following disclosure supplements, and to the extent inconsistent supersedes, the discussion in the product prospectus supplement dated January 14, 2016 under “Supplemental Discussion of U.S. Federal Income Tax Consequences.”

Under Section 871(m) of the Code, a “dividend equivalent” payment is treated as a dividend from sources within the United States. Such payments generally would be subject to a 30% U.S. withholding tax if paid to a non-U.S. holder. Under U.S. Treasury Department regulations, payments (including deemed payments) with respect to equity-linked instruments (“ELIs”) that are “specified ELIs” may be treated as dividend equivalents if such specified ELIs reference an interest in an “underlying security,” which is generally any interest in an entity taxable as a corporation for U.S. federal income tax purposes if a payment with respect to such interest could give rise to a U.S. source dividend. However, the IRS has issued guidance that states that the U.S. Treasury Department and the IRS intend to amend the effective dates of the U.S. Treasury Department regulations provide that withholding on dividend equivalent payments will not apply to specified ELIs that are not delta-one instruments and that are issued before January 1, 2019. Based on our determination that the notes are not delta-one instruments, non-U.S. holders should not be subject to withholding on dividend equivalent payments, if any, under the notes. However, it is possible that the notes could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events affecting the underlier or the notes, and following such occurrence the notes could be treated as subject to withholding on dividend equivalent payments. Non-U.S. holders that enter, or have entered, into other transactions in respect of the underlier or the notes should consult their tax advisors as to the application of the dividend equivalent withholding tax in the context of the notes and their other transactions. If any payments are treated as dividend equivalents subject to withholding, we (or the applicable withholding agent) would be entitled to withhold taxes without being required to pay any additional amounts with respect to amounts so withheld.

## SUPPLEMENTAL PLAN OF DISTRIBUTION (CONFLICTS OF INTEREST)

We will agree to sell to RBCCM, and RBCCM will agree to purchase from us, the principal amount of the notes specified, at the price specified, on the cover page of this pricing supplement. RBCCM has informed us that, as part of its distribution of the notes, it will reoffer them at a purchase price equal to [97.40]% of the principal amount to one or more other dealers who will sell them to their customers. The original issue price for notes purchased by certain fee-based advisory accounts will be between [97.40 and 100.00]% of the principal amount, which reflects a foregone underwriting discount with respect to the notes (i.e. the underwriting discount specified on the cover of this pricing supplement with respect to such notes is 0.00%). In the future, RBCCM or one of its affiliates, may repurchase and resell the notes in market-making transactions, with resales being made at prices related to prevailing market prices at the time of resale or at negotiated prices. For more information about the plan of distribution, the distribution agreement and possible market-making activities, see “Supplemental Plan of Distribution” in the accompanying prospectus supplement. For additional information as to the relationship between us and RBCCM, please see the section “Plan of Distribution Conflicts of Interest” in the accompanying prospectus.

We expect to deliver the notes against payment therefor in New York, New York on \_\_\_\_\_, 2017, which is expected to be the fifth scheduled business day following the trade date. Under Rule 15c6-1 of the Securities Exchange Act of 1934, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade notes on any date prior to two business days before delivery will be required, by virtue of the fact that the notes are initially expected to settle in five business days (T + 5), to specify alternative settlement arrangements to prevent a failed settlement.

RBCCM may use this pricing supplement in the initial sale of the notes. In addition, RBCCM or any other affiliate of Royal Bank of Canada may use this pricing supplement in a market-making transaction in a note after its initial sale. Unless RBCCM or its agent informs the purchaser otherwise in the confirmation of sale, this pricing supplement is being used in a market-making transaction.

RBCCM or another of our affiliates may make a market in the notes after their issuance date; however, it is not obligated to do so. The price that it makes available from time to time after the issue date at which it would be willing to repurchase the notes will generally reflect its estimate of their value. That estimated value will be based upon a variety of factors, including then prevailing market conditions, our creditworthiness and transaction costs. However, for a period of approximately three months after the trade date, the price at which RBCCM may repurchase the notes is expected to be higher than their estimated value at that time. This is because, at the beginning of this period, that

price will not include certain costs that were included in the original issue price, particularly our hedging costs and profits. As the period continues, these costs are expected to be gradually included in the price that RBCCM would be willing to pay, and the difference between that price and RBCCM's estimate of the value of the notes will decrease over time until the end of this period. After this period, if RBCCM continues to make a market in the notes, the prices that it would pay for them are expected to reflect its estimated value, as well as customary bid-ask spreads for similar trades. In addition, the value of the notes shown on your account statement may not be identical to the price at which RBCCM would be willing to purchase the notes at that time, and could be lower than RBCCM's price.

PS-17

---

## STRUCTURING THE NOTES

The notes are our debt securities. As is the case for all of our debt securities, including our structured notes, the economic terms of the notes reflect our actual or perceived creditworthiness. In addition, because structured notes result in increased operational, funding and liability management costs to us, we typically borrow the funds under these notes at a rate that is lower than the rate that we might pay for a conventional fixed or floating rate debt security of comparable maturity. This relatively lower implied borrowing rate, which is reflected in the economic terms of the notes, along with the underwriting discount and the fees and expenses associated with structured notes, typically reduces the initial estimated value of the notes at the time their terms are set.

In order to satisfy our payment obligations under the notes, we may choose to enter into certain hedging arrangements (which may include call options, put options or other derivatives) with RBCCM and/or one of our other subsidiaries. The terms of these hedging arrangements take into account a number of factors, including our creditworthiness, interest rate movements, and the tenor of the notes. The economic terms of the notes and their initial estimated value depend in part on the terms of these hedging arrangements. Our cost of hedging will include the projected profit that such counterparties expect to realize in consideration for assuming the risks inherent in hedging our obligations under the notes. Because hedging our obligations entails risks and may be influenced by market forces beyond the counterparties' control, such hedging may result in a profit that is more or less than expected, or could result in a loss. See "Use of Proceeds and Hedging" on page PS-13 of the accompanying product prospectus supplement PB-1. The lower implied borrowing rate, the underwriting discount and the hedging-related costs relating to the notes reduce the economic terms of the notes to you and result in the initial estimated value for the notes on the trade date being less than their original issue price. See "Risk Factors—Our Initial Estimated Value of the Notes Will Be Less than the Original Issue Price."

PS-18

---

TABLE OF CONTENTS

Pricing Supplement

Summary Information	PS-2
Hypothetical Examples	PS-4
Additional Risk Factors Specific to Your Notes	PS-7
The Underlier	PS-13
Supplemental Discussion of U.S. Federal Income Tax Consequences	PS-17
Supplemental Plan of Distribution (Conflicts of Interest)	PS-17
Structuring the Notes	PS-18

Product Prospectus Supplement PB-1 dated January 14, 2016

Summary	PS-1
Risk Factors	PS-3
General Terms of the Notes	PS-4
Hypothetical Returns on Your Notes	PS-12
Use of Proceeds and Hedging	PS-13
Historical Underlier Information	PS-14
Supplemental Discussion of Canadian Tax Consequences	PS-15
Supplemental Discussion of U.S. Federal Income Tax Consequences	PS-16
Employee Retirement Income Security Act	PS-20
Supplemental Plan of Distribution	PS-21

Prospectus Supplement dated January 8, 2016

About This Prospectus Supplement	i
Risk Factors	S-1
Use of Proceeds	S-8
Description of Notes We May Offer	S-8
Certain Income Tax Consequences	S-26
Supplemental Plan of Distribution	S-29
Documents Filed as Part of the Registration Statement	S-31

Prospectus dated January 8, 2016

Documents Incorporated by Reference	i
-------------------------------------	---



Where You Can Find More Information	ii
Further Information	ii
About This Prospectus	ii
Risk Factors	1
Royal Bank of Canada	1
Presentation of Financial Information	1
Caution Regarding Forward-Looking Information	2
Use of Proceeds	2
Consolidated Ratios of Earnings to Fixed Charges	3
Consolidated Capitalization and Indebtedness	3
Comparative per Share Market Price	4
Description of Debt Securities	4
Description of Common Shares	24
Tax Consequences	26
Plan of Distribution	37
Benefit Plan Investor Considerations	41
Limitations on Enforcement of U.S. Laws Against the Bank, Our Management and Others	44
Validity of Securities	45
Experts	45
Other Expenses of Issuance and Distribution	46

We have not authorized anyone to provide any information or to make any representations other than those contained or incorporated by reference in this pricing supplement, the accompanying product prospectus supplement PB-1, the accompanying prospectus supplement or the accompanying prospectus. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. These documents are an offer to sell only the notes offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in each such document is current only as of its respective date.

\$

Royal Bank of Canada

Buffered Digital Notes Linked to the  
iShares® U.S. Real Estate ETF, due

RBC Capital Markets, LLC