



Options Application

Use this application to apply to add options trading privileges to your new or existing Fidelity account. If you have already been granted privileges, use this application to add or update account owner or authorized agent information. Please complete in CAPITAL letters using black ink. If you need more room for information or signatures, use a copy of the relevant page.

Helpful to Know

Restrictions and Requirements

- Retirement accounts and health savings accounts are eligible only for the following strategies (non-prototype accounts are retirement accounts, but they are eligible for any option level):
 - Writing covered calls on equity options
 - Buying calls/puts on index, interest rate index, and equity options
 - Buying straddles/combinations on index, interest rate index, and equity options
 - Writing cash-covered index and equity options
 - Purchase of collars and conversions of equities
 - Hedged puts
- IRAs may have options spread trading added. If interested, please download and sign the Options Spread Agreement for IRAs from Fidelity.com.
- Custodial (UGMA/UTMA) accounts are eligible only for writing covered calls on equity options.
- Trust accounts must provide trustee information where information on account owners is requested.
- All account owners must complete the account owner sections and sign Section 5.

- Any authorized agent must complete Section 6 and sign Section 7.
- Any account owner or authorized individual indicating a securities industry association must also attach a valid "407 letter" from his or her employer.

Instructions for Corporations and Entities

- Unless options trading is specifically permitted in the corporate resolution you provided when you opened your account, you need to provide a new resolution containing options trading authorization.
- In Section 2, you need to provide information about the entity and/or the authorized individual, as follows:
 - Name: both authorized individual and entity
 - Last Four Digits of SSN or Tax ID Number: entity
 - Marital Status and Income Source/Employment: no answers needed
 - Associations and Corporate Control Status: authorized individual
 - Investment Experience: authorized individual
- If there is a second authorized individual on the account, please complete and submit additional copies of Sections 3 and 5. All authorized individuals must sign.

Form starts on next page. ►►

1. Current Fidelity Account

If you do not already have an account at Fidelity, this form must be accompanied by a new account application.

Account Number

New Account Number not yet assigned

2. Account Owner

Includes trustees.

First Name	Middle Name	Last Name
Date of Birth MM DD YYYY	Trust or Entity Name If applicable	

Marital Status

Single/Divorced/Widowed Married

Number of Dependents

Income Source

Check one and provide information. Industry regulations require us to ask for this information.

Employed: Self-employed:

Occupation	Employer Leave blank if self-employed.		
Employer Address			
City	State/Province	ZIP/Postal Code	Country

Retired: Not employed:

Source of Income Pension, investments, spouse, etc.

Associations

As a person associated with a member firm, you are obligated to receive consent from that firm. Fidelity has existing consent agreements with many firms for their employees to maintain accounts with Fidelity and to deliver transactional data. If your firm is not one of them, Fidelity will attempt to contact your firm's compliance office.

If you are employed by or associated with a broker-dealer, stock exchange, exchange member firm, the Financial Industry Regulatory Authority (FINRA), a municipal securities dealer, or other financial institution, or are the spouse or an immediate family member residing in the same household of someone who meets the aforementioned employment criteria, provide the company's name and address below. By providing this information and completing this form, you hereby authorize Fidelity to provide the associated person's employer with duplicate copies of confirmations and statements, or the transactions data contained therein, for your account(s) and any accounts you choose to have on a consolidated statement for purposes of their compliance review.

Company Name			
Company Address			
City	State/Province	ZIP/Postal Code	Country

If you are, or an immediate family/household member is, a director, corporate officer, or 10% shareholder of a publicly held company, or a control person of a publicly traded company under SEC Rule 144, you must provide the information below.

Company Name	Trading Symbol or CUSIP

Account Owner continues on next page. ►►



Investment Experience

Provide the number of years trading each security.

Stocks	Years	Bonds	Years	Commodities	Years	Equity Options	Years	Index Options	Years
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Provide the average size and frequency of prior securities transactions.

Average Size \$1,000, \$5,000, \$10,000, etc.	Transactions per Month
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3. Additional Account Owner ALL owners must be listed. For additional owners, use a copy of this section.

Includes trustees.

First Name	Middle Name	Last Name
Date of Birth MM DD YYYY		Trust or Entity Name If applicable

Marital Status

Single/Divorced/Widowed Married

Number of Dependents

Income Source

Check one and provide information. Industry regulations require us to ask for this information.

Employed: Self-employed:

Occupation	Employer Leave blank if self-employed.		
Employer Address			
City	State/Province	ZIP/Postal Code	Country

Retired: Not employed:

Source of Income Pension, investments, spouse, etc.

Associations

As a person associated with a member firm, you are obligated to receive consent from that firm. Fidelity has existing consent agreements with many firms for their employees to maintain accounts with Fidelity and to deliver transactional data. If your firm is not one of them, Fidelity will attempt to contact your firm's compliance office.

If you are employed by or associated with a broker-dealer, stock exchange, exchange member firm, the Financial Industry Regulatory Authority (FINRA), a municipal securities dealer, or other financial institution, or are the spouse or an immediate family member residing in the same household of someone who meets the aforementioned employment criteria, provide the company's name and address below. By providing this information and completing this form, you hereby authorize Fidelity to provide the associated person's employer with duplicate copies of confirmations and statements, or the transactions data contained therein, for your account(s) and any accounts you choose to have on a consolidated statement for purposes of their compliance review.

Company Name			
Company Address			
City	State/Province	ZIP/Postal Code	Country

If you are, or an immediate family/household member is, a director, corporate officer, or 10% shareholder of a publicly held company, or a control person of a publicly traded company under SEC Rule 144, you must provide the information below.

Company Name	Trading Symbol or CUSIP
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Additional Account Owner continues on next page. ►►



Investment Experience

Provide the number of years trading each security.

Stocks	<input type="text" value="Years"/>	Bonds	<input type="text" value="Years"/>	Commodities	<input type="text" value="Years"/>	Equity Options	<input type="text" value="Years"/>	Index Options	<input type="text" value="Years"/>
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Provide the average size and frequency of prior securities transactions.

Average Size \$1,000, \$5,000, \$10,000, etc.	Transactions per Month
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4. Objective and Trading Plans

Investment Objective

Check the objective that most closely reflects your approach for this account.

For more on objectives, go to Fidelity.com/investmentobjective.

Industry regulations require us to ask for this information.

← Lower Risk/Shorter Time Frame	Higher Risk/Longer Time Frame →				
<input type="checkbox"/> Short Term Seek to preserve capital and can accept the lowest returns in exchange for price stability.	<input type="checkbox"/> Conservative Seek to minimize fluctuations in market values by taking an income-oriented approach with some potential for capital appreciation.	<input type="checkbox"/> Balanced Seek the potential for capital appreciation and some income and can withstand moderate fluctuations in market values.	<input type="checkbox"/> Growth Seek growth and can withstand significant fluctuations in market values.	<input type="checkbox"/> Aggressive Growth Seek aggressive growth and can tolerate wide fluctuations in market values, especially over the short term.	<input type="checkbox"/> Most Aggressive Seek very aggressive growth and can tolerate very wide fluctuations in market values, especially over the short term.

Trading Strategy

Plans **C, D, and E** require margin. If you do not already have margin, attach a Margin Application. If you are selecting **C, D, or E** for a Investment Only Retirement Account, see the important information in Section 5, Account Owner Signatures and Dates.

Is your investment objective (above) Most Aggressive? If so, choose one of the following trading strategies: **A, B, C, D, or E**. If not, choose **A ONLY**.

<input type="checkbox"/> A Covered call writing on equity options	<input type="checkbox"/> B Purchases of calls and puts (equity, index, and interest rate index), writing of cash covered puts, purchases of straddles/combinations (equity, index, and interest rate index), collars and conversions of equities, and hedged puts (also includes A)	<input type="checkbox"/> C Equity and index spreads, covered put writing (selling puts against stock that is held short), and reverse conversions of equity options (also includes A and B)	<input type="checkbox"/> D Uncovered writing of equity options, uncovered writing of straddles/combinations on equities and convertible hedging (also includes A, B, and C)	<input type="checkbox"/> E Uncovered writing of index options, uncovered writing of straddles/combinations on indexes, covered index options, and collars and conversions of index options (also includes A, B, C, and D)
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Financial Profile

Answer for ALL owners combined. Trusts/entities: Answer based on trust/entity assets.

Check one in each column. Industry regulations require us to ask for this information.

Annual Income From all sources	Estimated Net Worth Excluding your home	Estimated Liquid Net Worth Cash and assets easily converted to cash
<input type="checkbox"/> \$0–\$20,000	<input type="checkbox"/> \$0–\$30,000	<input type="checkbox"/> \$0–\$15,000
<input type="checkbox"/> \$20,001–\$50,000	<input type="checkbox"/> \$30,001–\$50,000	<input type="checkbox"/> \$15,001–\$50,000
<input type="checkbox"/> \$50,001–\$100,000	<input type="checkbox"/> \$50,001–\$100,000	<input type="checkbox"/> \$50,001–\$100,000
<input type="checkbox"/> \$100,001 or more	<input type="checkbox"/> \$100,001–\$500,000	<input type="checkbox"/> \$100,001–\$500,000
	<input type="checkbox"/> \$500,001 or more	<input type="checkbox"/> \$500,001 or more

Form continues on next page. ►►

5. Account Owner Signatures and Dates

ALL account owners must sign and date. For additional owners, use a copy of this page.

"You/your" refers to all account owners.

By signing below, you:

- Affirm that you have received, read, understand, and agree to be bound by the Options Agreement (the "Agreement") and disclosure materials identified in the Agreement, all as currently in effect and as may be amended in the future. The Agreement shall inure to the benefit of Fidelity's successors and assigns, whether by merger, consolidation, or otherwise. Fidelity may transfer your account to its successors and assigns, and this Agreement shall be binding upon your heirs, executors, administrators, successors, and assigns.
 - Certify that you have provided Fidelity with the required personal, financial, and investment information for all parties authorized to place trades on this account, including any authorized agents, that all information provided is correct, and that you will ensure that any parties who subsequently gain this authority will provide required information about themselves to Fidelity.
 - Agree to forward copies of the Options Agreement and the disclosure materials to any authorized agents.
 - Represent and warrant that if you have not completed the section titled Associations, you are not associated with or employed by a stock exchange or a broker-dealer and that you are not a control person or associate of a public company under SEC Rule 144 (such as a director, 10% shareholder, or a policymaking officer), or an immediate family or household member of such a person.
 - Acknowledge that Fidelity will not be liable for any loss, expenses, or cost arising out of your instructions, provided that it institutes reasonable procedures to prevent unauthorized transactions.
- If adding Options Trading Plan C, D, or E to a Non-Prototype Retirement Account:*
- Acknowledge that you have read and understand the following points: As trustee, it is your responsibility to ensure that all account transaction and investment instructions provided are in accordance with the underlying plan and trust. In addition to risks generally applicable to margin borrowing, utilizing margin within a tax-advantaged retirement account poses other risks, including: 1) using account assets to satisfy margin calls reduces tax-advantaged savings, 2) annual contribution limits may restrict a plan trustee's ability to satisfy margin calls, and 3) debt-financed investment income within a tax-advantaged account can generate unrelated business taxable income (UBTI). You are strongly encouraged to consult your tax or benefits advisor prior to utilizing margin borrowing on this account.

These accounts are governed by a predispute arbitration clause, which appears on the last page of the Options Agreement, and you acknowledge that you have received a copy of this clause.

PRINT OWNER NAME	
OWNER SIGNATURE	DATE MM/DD/YYYY
SIGN X	X
PRINT OWNER NAME	
OWNER SIGNATURE	DATE MM/DD/YYYY
SIGN X	X
PRINT OWNER NAME	
OWNER SIGNATURE	DATE MM/DD/YYYY
SIGN X	X
PRINT OWNER NAME	
OWNER SIGNATURE	DATE MM/DD/YYYY
SIGN X	X

Form continues on next page. ►►

6. Authorized Agent

If there is an authorized agent on this account, the agent must complete and sign this section. Attach a Authorized Access form (available at Fidelity.com) unless one is already on file for this authorized agent.

For additional authorized agents, make a copy of this section.

First Name	Middle Name	Last Name
Title		Relationship to Owner <i>Investment advisor, family, trustee, etc.</i>
		Last four digits of SSN or Taxpayer ID

Income Source

Check one and provide information. Industry regulations require us to ask for this information.

Employed: Self-employed:

Occupation	Employer <i>Leave blank if self-employed.</i>
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Retired: Not employed:

Source of Income <i>Pension, investments, spouse, etc.</i>
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Investment Experience

Provide the number of years trading each security.

Stocks	Years	Bonds	Years	Commodities	Years	Equity Options	Years	Index Options	Years
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Provide the average size and frequency of prior securities transactions.

Average Size <i>\$1,000, \$5,000, \$10,000, etc.</i>	Transactions per Month
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Options Trading Experience

Check all that apply.

- Covered call writing on equity options
- Purchases of calls and puts (equity, index, and interest rate index), writing of cash covered puts, purchases of straddles/combinations (equity, index, and interest rate index), collars and conversions of equities, and hedged puts
- Equity and index spreads, covered put writing (selling puts against stock that is held short), and reverse conversions of equity options
- Uncovered writing of equity options, uncovered writing of straddles/combinations on equities and convertible hedging
- Uncovered writing of index options, uncovered writing of straddles/combinations on indexes, covered index options, and collars and conversions of index options

7. Authorized Agent Signature and Date

By signing below, you:

- Affirm that you have received, read, understand, and agree to be bound by the Options Agreement (the "Agreement") and disclosure materials identified in the Agreement, all as currently in effect and as may be amended in the future. The Agreement shall inure to the benefit of Fidelity's successors and assigns, whether by merger, consolidation, or otherwise.
- Accept all terms and conditions described in this application and in the Options Agreement.
- State that you are familiar with and understand the investment objectives and trading plans of the account owner(s) and will only use trading strategies that are consistent with those objectives and plans.
- Certify that you have provided Fidelity with your required personal, financial, and investment information, and that this information is complete and truthful.

These accounts are governed by a predispute arbitration clause, which appears on the last page of the Options Agreement, and you acknowledge that you have received a copy of this clause.

PRINT AUTHORIZED AGENT NAME	
AUTHORIZED AGENT SIGNATURE	DATE MM/DD/YYYY
SIGN X	X



Did you print and sign the form, and attach any necessary documents?

Send the ENTIRE form and any attachments to Fidelity Investments. You will receive a new account profile, or updated account profile confirming the changes indicated on the application.

Questions? Go to [Fidelity.com/options](https://www.fidelity.com/options) or call 1-800-544-6666.

Use postage-paid envelope, drop off at a Fidelity Investor Center, OR deliver to:

Regular mail

Fidelity Investments
P.O. Box 770001
Cincinnati, OH 45277-0002

Overnight mail

Fidelity Investments
100 Crosby Parkway KC1K
Covington, KY 41015

On this form, "Fidelity" means Fidelity Brokerage Services LLC and its affiliates. Brokerage services are provided by Fidelity Brokerage Services LLC, Member NYSE, SIPC. All trademarks and service marks indicated herein are the property of their respective owners. 427178.9.0 (04/17)



Trusted Contact Authorization Form

Your physical and financial well-being are among our top priorities. Let us help you safeguard both.

Use this form to designate a primary and alternate trusted contact, that is 18 years or older, for your Fidelity account(s). Do NOT use this form for charitable giving accounts or workplace retirement plans, such as a 401(k). Type on screen or fill in using CAPITAL letters and black ink. If you need more room for information or signatures, make a copy of the relevant page.

Helpful to Know

- To prepare yourself and your trusted contact(s) for success, consider choosing someone with whom you are comfortable discussing your health, relationships, loved ones, work, and finances. You may also want to consider selecting someone who isn't currently involved in your financial life, like a beneficiary or power of attorney, to ensure fairness and objectivity.
- This form supersedes any previous trusted contact designations that you may have submitted.
- If Fidelity has questions or concerns about your health or welfare due to potential diminished capacity, financial exploitation or abuse, endangerment, and/or neglect, this form authorizes us to get in touch with the trusted contact(s) and:
 - Provide the trusted contact(s) listed below with information about you and/or your account(s), including notice of a temporary hold, but does not provide him or her with the ability to transact on your account(s).
 - Inquire about your current contact information or health status.
 - Inquire about whether another person or entity has legal authority to act on your behalf (e.g., legal guardian or conservator, executor, or trustee).

1. Account Owner

Name	Social Security or Taxpayer ID Number
<input type="text"/>	<input type="text"/>

2. Accounts Included

Check only one. ALL eligible accounts associated with the above Social Security or Taxpayer ID Number > Skip to Section 3.

ONLY the account(s) listed below:

Fidelity Account Number <input type="text"/>	Fidelity Account Number <input type="text"/>	Fidelity Account Number <input type="text"/>
Fidelity Account Number <input type="text"/>	Fidelity Account Number <input type="text"/>	Fidelity Account Number <input type="text"/>

3. Primary Trusted Contact

First Name	Middle Name	Last Name
<input type="text"/>	<input type="text"/>	<input type="text"/>
Email <input type="text"/>		
Phone <input type="text"/>	Extension <input type="text"/>	<input type="checkbox"/> Check here if phone number is a mobile number.
Relationship to Owner <input type="text"/>		

Primary Trusted Contact continues on next page. >>

Legal/Permanent Address

This cannot be a P.O. box, mail drop, or c/o.

Street Address			
City	State/Province	ZIP/Postal Code	Country

4. Alternate Trusted Contact

First Name	Middle Name	Last Name
Email		
Phone	Extension	<input type="checkbox"/> Check here if phone number is a mobile number.
Relationship to Owner		

Legal/Permanent Address

This cannot be a P.O. box, mail drop, or c/o.

Street Address			
City	State/Province	ZIP/Postal Code	Country

5. Signature and Date *Form cannot be processed without your signature and date.*

By signing below, you:

- Authorize Fidelity to communicate with your trusted contact(s) and disclose information about designated accounts to address possible financial exploitation or confirm specifics about your current contact information, your health status, or the identity of any legal guardian, executor, trustee, or holder of a power of attorney, or as otherwise permitted.
- Understand that this does not authorize your trusted contact(s) to separately access or transact on your account(s).
- Understand that you may identify multiple trusted contacts on this form, provided they are 18 years or older.
- Understand that this trusted contact designation is optional and you may withdraw it at any time by notifying Fidelity in writing to one of the business addresses listed below.
- Understand that you may change your trusted contact(s) at any time by completing a new form.
- Certify that all information you provided is correct to the best of your knowledge.
- Acknowledge that we may remove any trusted contact from any account, at any time or for any reason.

PRINT OWNER NAME	
OWNER SIGNATURE	DATE MM/DD/YYYY
SIGN X	X

Did you sign the form? Send the ENTIRE form to Fidelity.

Questions? Go to Fidelity.com/trustedcontact or call 800-343-3548.

Use the postage-paid envelope, drop off at a Fidelity Investor Center, OR deliver to:

Regular mail	Overnight mail
Fidelity Investments P.O. Box 770001 Cincinnati, OH 45277-0002	Fidelity Investments 100 Crosby Parkway KC1K Covington, KY 41015

On this form, "Fidelity" means Fidelity Brokerage Services LLC and its affiliates. Brokerage services are provided by Fidelity Brokerage Services LLC, Member NYSE, SIPC. 802990.1.0 (02/18)

Options Agreement

This document describes the features, policies, costs, and risks associated with options trading. Please review this document and keep it for your records. Do not return it to Fidelity.

How to Contact Us:

For matters concerning your account, including questions, changes, and notifications of errors, reach us:

By Phone:

1-800-544-6666

In Writing:

Fidelity Investments
PO Box 770001
Cincinnati, OH 45277-0045

Who's Who in This Agreement

In this document, "Fidelity," "us," and "we" includes Fidelity Brokerage Services LLC ("FBS"), Fidelity Distributors Corporation, and National Financial Services LLC ("NFS"), and their employees, agents, and representatives, as the context may require. "You" and "account owner" refer to the registered owner(s) of the account or to any new account applicant; for any account with more than one owner or authorized person (such as a joint or trust account), "you" and "account owner" or "account owners" refer to all owners, collectively and individually.

Commitments by Fidelity and You

Fidelity's Commitments to You

Under this agreement, Fidelity has certain rights and responsibilities. When we accept your options application, we are agreeing to accept instructions on your account for buying, writing, and exercising options, according to the terms described in this agreement.

Your Commitments to Fidelity

By signing the options application, you:

- Acknowledge that you have received this agreement and the appropriate Options Disclosure Document(s) of The Options Clearing Corporation, that you accept the terms of this agreement, and that you will not enter any order for options until you have read and understood both the agreement and the Options Disclosure Document(s)
- Specifically affirm that you understand the risks of options as described in this agreement and the Options Disclosure Document(s), and that in full knowledge of these risks you have determined that options trading is appropriate for you, based on your own careful examination of your financial resources, investment objectives, and risk tolerance
- Acknowledge, and agree to be bound by, the rules of the Financial Industry Regulatory Authority (FINRA), the New York Stock Exchange, Inc. (NYSE), and The Options Clearing Corporation that apply to options contracts
- Agree that you, whether alone or in concert with others, will not violate the position or exercise limits of the options exchanges as set forth in Options Disclosure Document(s)
- Agree not to hold Fidelity liable in connection with the execution, handling, selling, purchasing, or endorsing of options for your account
- Agree to let us monitor and/or record any phone conversations with you
- Agree to let us verify the information you provide, such as payment and employment information, and obtain credit reports and other credit-related information about you at any time
- Agree to resolve disputes concerning your relationship with us (other than class actions) through arbitration rather than in a court of law
- Agree to notify us in writing any time there is a material change in your financial circumstances or investment objectives

Options Transaction Policies

The following policies are intended to protect you, your account, and Fidelity from potential negative impacts that may result from utilizing options strategies in your account. For example, the minimum equity/position requirement discussed below is intended to help ensure that an adequate amount of cash or securities remains in the account to cover possible costs or liabilities that may result from options strategies that you choose to utilize.

Minimum equity/position requirement

For each account approved for options trading, we will determine a minimum level of equities and/or other positions that the investor must maintain in the account. We may change this amount at any time, at our discretion and without advance notice. You may contact a Fidelity representative for information on the applicable limit for your account. It is your responsibility to ensure that your required minimum has been met before writing any option. You authorize us to not generally allow withdrawals of cash or securities that would reduce either your equity or position balance to below your required minimum, and to refuse orders to sell securities that are being held in connection with your required minimum. You agree not to hold us liable for any loss that you may sustain as a result of the enforcement of this policy on required minimums.

Exercise of options

As the account owner, it is your responsibility to exercise, in a proper and timely manner, any right, privilege, or obligation of any put, call, or other option that we may purchase, handle, endorse, or carry for your account(s).

However, in the absence of any instructions from you, you authorize us to exercise any in-the-money options that remain in your account on their expiration day, so long as they are in-the-money by \$0.01 or greater or in accordance with Fidelity's policies then in effect, as applicable. If you do not want us to exercise any expiring options, you must notify us by 4:20 p.m. Eastern time on the expiration date. If we do not receive your instructions by this time, you agree to waive any and all claims for damage or loss that you might have against us, at that time or later, arising out of the fact that we did not receive your orders to exercise or not exercise in time.

If sufficient assets and/or other positions are not available to cover the exercise of an option, you authorize Fidelity to take the following action, among others, on your behalf: placing an order to sell a long position or instructing the OCC not to exercise valuable options on or prior to the last trading day. If an option is exercised, you authorize us to close out the position(s) that result from the exercise. You agree to waive and to release us and our officers, employees and agents from any and all claims of damage or loss, then or at a later time sustained, as a result of the exercise or nonexercise of an option contract(s).

When an option is exercised, the resulting position ordinarily is maintained in your account until we receive further instructions from you. However, if a position cannot be maintained (for instance, if it would result in a short position in a retirement account, result in an equity level that is below the aforementioned minimum, or if there are no shares available for a short sale), you authorize us to liquidate the position at your sole risk and will charge you two commissions.

When an option is exercised, you will be charged the full aggregate exercise price for any underlying security.

Allocation of exercise notices

In allocating exercise notices, we use the random selection method, meaning that the options to be exercised are selected at random from all short option positions that are open at the time (including those established that day). All short option positions may be assigned at any time. A detailed description of this method is available upon written request.

Protective steps you authorize us to take

You authorize us to hold any securities and funds in any of your Fidelity accounts and use them as security for the performance of your obligations to us under this agreement with respect to any open options position.

If you have margin on your account, and you do not meet our margin calls promptly, we may, in our sole discretion and without notifying you, take any and all steps necessary to protect ourselves in connection with options transactions made for your account. This may include such steps as buying or selling short any or all shares represented by options in your account, or buying, selling, exercising, or blocking the exercise of any put or call options. In such a case, you will be required to reimburse us for any losses and expenses that we incur, including attorneys' fees.

If you become insolvent or die, or if your property is attached by others, we may take whatever steps we consider necessary or appropriate to protect our interests against loss.

All obligations and liabilities arising under this account are joint and several, and we may enforce them against any or all account holders. Although Fidelity may use other methods when it determines they may be more appropriate, Fidelity reserves the right to use the provisions described in this section at any time, except in cases involving retirement accounts when these provisions would conflict with the Employee Retirement Income Security Act of 1974 (ERISA) or the Internal Revenue Code of 1986, both as amended.

Limits to Our Responsibility

Although we strive to ensure the quality and reliability of our services, including electronic services (such as online, wireless, and automated telephone services), neither we nor any third party whose services we arrange for is responsible for the availability, accuracy, timeliness, completeness, or security of any service related to your account.

You therefore agree that we are not responsible for any losses you incur (meaning claims, damages, actions, demands, investment losses, or other losses, as well as any costs, charges, attorneys' fees, or other fees and expenses) as a result of any of the following:

- Occurrences related to governments or markets, such as restrictions, suspensions of trading, or high market volatility or trading volumes
- Uncontrollable circumstances in the world at large, such as wars, earthquakes, power outages, or unusual weather conditions
- Occurrences related to computers and communications, such as a network or systems failure, a message interception, or an instance of unauthorized access or breach of security

Important Information about Options Trading and Its Risks

Before you make use of options in any way, it's essential to fully understand the risks involved, and to be certain that you are prepared to accept them. The bullets below outline general risks as well as the special risks associated with writing uncovered options.

General Risks

- **Options are complex and risky, and are not suitable for many investors.** This applies to both the purchase and the writing of options. Unless you clearly understand the rights and obligations that an options transaction creates for you—and the inherent risks involved, especially during extreme market volatility or trading volumes—you should avoid options.
- **When buying an option, or when writing a covered call option, you can lose 100% of your investment.** This includes both the premium you paid and your transaction costs. A covered call option is one for which you own the underlying security (or another security convertible, exchangeable, or exercisable into that security). As noted below, with uncovered options, you can lose more than 100% of your investment.
- **Many factors affect the price of an options contract.** Pricing can be influenced by such factors as the relationship between the exercise price and the market price of the underlying security, the expiration date of the option, and the price fluctuations or other characteristics of the underlying stock.
- **Market conditions or temporary restrictions of trading or exercising may interfere with your trading plans.** If the secondary market for a given option were to become unavailable—temporarily or permanently—investors could not engage in closing transactions, and an option writer would remain obligated until expiration or assignment.

In addition, an options exchange or any regulatory body with jurisdiction may restrict transactions in particular options, or the exercise of options contracts, from time to time and based solely on their own discretion.

- **Index options have special characteristics and risks.** Index option exercises are settled with cash, not securities. In addition, because the exercise price of an index option is always based on the closing index value, an index option that is in the money during trading hours may be out of the money when the closing value is calculated—a risk to consider whenever you place an exercise order before the closing value is known.

Additional Risks of Uncovered Options

Writing uncovered options is suitable only for the investor who understands the risks, has the financial capacity and willingness to incur potentially substantial losses, and has sufficient liquid assets to meet applicable margin requirements.

- **Any time you write an uncovered option, you expose yourself to significant financial losses.** If the value of the underlying instrument(s) moves against you, your losses could be many times greater than the cost of the option itself. If an underlying instrument is affected by rapid price volatility or high trading volume, you may be unable to close out your position and you may be forced to endure significantly greater losses than otherwise.
- **With certain uncovered options, your potential losses are unlimited.** These include writing an uncovered call and combination writing (writing both a put and a call on the same underlying instrument). The risk of writing an uncovered put option is not theoretically unlimited, but in practice the losses can be as substantial as with writing an uncovered call.
- **Writing uncovered options may trigger a margin call.** If the value of an underlying instrument moves against your uncovered options position, your broker may demand significant additional margin payments. If you're not able to make these payments, your broker may sell securities in your accounts, liquidate options positions, or take other measures as described in your margin agreement.
- **American-style options work differently from European-style options.** The writer of an American-style option is subject to being assigned an exercise at any time after he or she has written the option until the option expires. By contrast, the writer of a European-style option is subject to exercise assignment only during the exercise period.

The information here is only a summary of the risks associated with options. As required by this agreement, be sure to read "Characteristics and Risks of Standardized Options," in particular the chapter called "Risks of Buying and Writing Options."

If you have any questions or concerns about options, please contact Fidelity.

Terms Concerning This Agreement

If you have a margin agreement with Fidelity, it is incorporated into this one by reference (legally considered part of this document). In the case of any conflict between the two agreements, this one will prevail.

This agreement and its enforcement are governed by the laws of the Commonwealth of Massachusetts, except with respect to its conflicts-of-law provisions.

All options transactions and exercises are subject to the rules and customs of The Options Clearing Corporation and of the marketplace where they are executed, as well as to applicable state and federal laws.

We may amend or terminate this agreement at any time. This may include changing, dropping, or adding fees and policies, changing features and services or the entities that provide them, and limiting the usage or availability of any feature or service, within the limits of applicable laws and regulations. Although it is our policy to send notice to account owners of any material changes, we are not obligated to do so in most cases. Outside of changes originating in these ways, no provision of this agreement can be amended or waived except in writing by an authorized representative of Fidelity.

Fidelity may transfer its interests in this account or agreement to any of its successors and assigns, whether by merger, consolidation, or otherwise. You may not transfer your interests in your account or agreement (including de facto transferral by giving a non-owner access to the account using a personal identification number [PIN]), except with the prior written approval of Fidelity, or through inheritance, corporate dissolution, or similar circumstance, as allowed by law, in which case any rights and obligations in existence at the time will accrue to, and be binding on, your heirs, executors, administrators, successors, or assigns.

We may enforce this agreement against any and all account owners. Although we may not always enforce certain provisions of this agreement, we retain our full right to do so at any time.

If any provision of this agreement is found to be in conflict with applicable laws, rules, or regulations, either current or future, that provision will be enforced to the maximum extent allowable, or made to conform, as the case may be. However, the remainder of this agreement will remain fully in effect.

Disclosures

Receipt of Communications

Note that so long as we send communications to you at the physical or electronic address of record given on the application, or to any other address given to us by an authorized person, the communications are legally presumed to have been delivered, whether you actually receive them or not. In addition, confirmations and statements are legally presumed to be accurate unless you specifically tell us otherwise.

Personal Information

For the name and address of any credit reporting agency from which we or a card issuer has obtained information about you, send a written request to us or the card issuer, as applicable.

Service Providers

Brokerage account and margin credit services are provided by NFS, an affiliate of FBS. Bonds may be traded through NFS (which may choose to act as principal or agent) or through external dealers. Services available through this account are the property of Fidelity or the third parties from which Fidelity has obtained rights.

Routing of Orders

Some options are traded in more than one marketplace. Absent any specific instructions from you, we may choose the market in which your transactions in these options are executed.

Resolving Disputes—Arbitration

This agreement contains a pre-dispute arbitration clause. Under this clause, which you agree to when you sign your account application, you and Fidelity agree as follows:

- A. All parties to this agreement are giving up the right to sue each other in court, including the right to a trial by jury, except as provided by the rules of the arbitration forum in which a claim is filed.
- B. Arbitration awards are generally final and binding; a party's ability to have a court reverse or modify an arbitration award is very limited.
- C. The ability of the parties to obtain documents, witness statements, and other discovery is generally more limited in arbitration than in court proceedings.
- D. The arbitrators do not have to explain the reason(s) for their award unless, in an eligible case, a joint request for an explained decision has been submitted by all parties to the panel at least 20 days prior to the first scheduled hearing date.
- E. The panel of arbitrators may include a minority of arbitrators who were or are affiliated with the securities industry.
- F. The rules of some arbitration forums may impose time limits for bringing a claim in arbitration. In some cases, a claim that is ineligible for arbitration may be brought in court.
- G. The rules of the arbitration forum in which the claim is filed, and any amendments thereto, shall be incorporated into this agreement.

All controversies that may arise between you and us concerning any subject matter, issue or circumstance whatsoever (including, but not limited to, controversies concerning any account, order or transaction, or the continuation, performance, interpretation or breach of this or any other agreement between you and us, whether

entered into or arising before, on or after the date this account is opened) shall be determined by arbitration in accordance with the rules then prevailing of the Financial Industry Regulatory Authority (FINRA) or any United States securities self-regulatory organization or United States securities exchange of which the person, entity or entities against whom the claim is made is a member, as you may designate. If you commence arbitration through a United States self-regulatory organization or United States securities exchange and the rules of that organization or exchange fail to be applied for any reason, then you shall commence arbitration with any other United States securities self-regulatory organization or United States securities exchange of which the person, entity or entities against whom the claim is made is a member. If you do not notify us in writing of your designation within five (5) days after such failure or after you receive from us a written demand for arbitration, then you authorize us to make such designation on your behalf. The commencement of arbitration through a particular self-regulatory organization or securities exchange is not integral to the underlying agreement to arbitrate. You understand that judgment upon any arbitration award may be entered in any court of competent jurisdiction.

No person shall bring a putative or certified class action to arbitration, nor seek to enforce any predispute arbitration agreement against any person who has initiated in court a putative class action; or who is a member of a putative class action who has not opted out of the class with respect to any claims encompassed by the putative class action until: (i) the class certification is denied; or (ii) the class is decertified; or (iii) the customer is excluded from the class by the court. Such forbearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this agreement except to the extent stated herein.

On this form, "Fidelity" means Fidelity Brokerage Services LLC and its affiliates. Brokerage services are provided by Fidelity Brokerage Services LLC, Member NYSE, SIPC. 439614.7.0 (07/15)