



Cboe Margin Manual

November 30, 2021

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Cboe MARGIN MANUAL

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INTRODUCTION

This manual has been developed by Cboe to assist the margin personnel of member firms as well as to serve as a guide to all users of options. The requirements explained are based on the long-standing strategy-based approach and associated rules and regulations currently in effect. **The requirements covered in this manual are minimums based on Exchange (as well as other self-regulatory organization) rules. Brokerage firms may have higher requirements.** Rules and regulations are subject to change. This manual should be used as a reference document and is not intended to be an all-encompassing restatement of Federal Reserve Board and Exchange margin rules. Persons using this manual should be familiar with margin computational methods and procedures as well as the margin requirements for all types of securities. Users contemplating margin account transactions are reminded that a \$2,000 minimum margin account equity is required to effect new securities transactions and commitments [Cboe Rule 10.3(i)]. Further, broker-dealers require a minimum margin account equity well in excess of \$2,000 for uncovered, short option transactions. It should be emphasized that substitutions involving loan value and non-loan value securities be given consideration with regard to the relative changes in an account's maximum loan value and debit balance rather than only to the proceeds of a sale.

Day trading margin requirements are not covered in this manual. Day trading margin requirements are established by the rules of the self-regulatory organizations. See Cboe Rule 10.3(j) and FINRA Rule 4210(f)(8) for requirements, which include a \$25,000 minimum account equity requirement for pattern day trading.

For further information, please visit www.cboe.com and www.cboe.com/contact/. Also, Investor Services (Options Industry Council) can be contacted at the following e-mail address: options@theocc.com.

Long Options (listed) (more than 9 months until exp.)		Percentage of Purchase Cost / Market Value	Effective Date
Equity	} equity based	75%	8-23-99
ETF			
Index			
Volatility Index			
Short Options (listed)	Percentage of Underlying	Minimum Percentage	Effective Date
Equity	20%	10%	6-6-88
Narrow Based Index	20%	10%	6-6-88
Broad Based Index	15%	10%	6-6-88
Volatility Index (Narrow)	20%	10%	2-24-06
Volatility Index (Broad)	20%	10%	7-25-14
Spreads	Requirement		Effective Date
All Types	Maximum Potential Loss Computation		8-29-12
Long Box Spread (loan value)	50% of Exercise Price Differential		8-23-99

Long options with 9 months or less until expiration must be paid for in full. Note that in respect of short put options, the minimum percentage is applied to the put's exercise price instead of to the underlying value (effective 6/02/97). Certain long box spreads are eligible for margin of 50% of the exercise price differential (effective 8/23/99). Additionally, certain spread strategies having limited risk are permitted in the cash account (effective 8/23/99), as detailed later in this Margin Manual. Certain strategies involving an American

style option and a position in the underlying (i.e., Long Put / Long Underlying, Long Call / Short Underlying, Conversion, Reverse Conversion and Collar) are eligible for reduced **maintenance** margin requirements (effective 8/23/99), as detailed later in this manual.

INITIAL AND MAINTENANCE REQUIREMENTS

This schedule contains a description of Exchange margin requirements for various positions in put options, call options, combined put-call positions and underlying positions offset by option positions. Unless noted otherwise, requirements are for listed options. Consonant with Federal Reserve Board Regulation T, initial requirements must be satisfied within four (4) business days after trade date. Sale proceeds may be applied toward the initial requirement. Maintenance requirements must be satisfied within fifteen (15) business days. Positions may be margined separately to obtain lowest requirement. It is not unusual for a brokerage firm to require that initial and maintenance requirements be satisfied sooner than the respective four (4) and fifteen (15) business days required by Cboe rules.

Brokerage firms require additional margin with respect to calendar (or time) spread strategies formed with options that have European style exercise. Additional margin or alternative treatment is warranted because of the possibility that the value of the long option (which cannot be exercised if the short option it is spread against is assigned) is insufficient to cover the loss if sold in the market. This is because the price of the long option in the market is influenced by the expected level of the underlying instrument when the long option can be exercised (i.e., at its expiration). In other words, the long option could be priced at less than parity to the level of the underlying instrument at the time of any assignment of the short option. Its price is more dependent on the level of the underlying instrument expected at the time it can be exercised. This manual does not take into consideration requirements that address this phenomenon. Again, brokerage firms require additional margin. It is also possible that a brokerage firm will not recognize calendar spreads involving options that have European style exercise and will instead treat the short option component as uncovered.

The characteristic of options with European style exercise to price based on the level of the underlying instrument expected at the time the option can be exercised is more pronounced for options on the Cboe Volatility Index ("VIX"). VIX options have European style exercise. The long option in a VIX option calendar spread is going to be priced based on what the VIX is expected to be at the option's expiration. VIX options tend to be priced based on the VIX futures contract with a settlement month that coincides with the option expiration. While not the underlying instrument, the futures with a like settlement / expiration mimics the underlying for the option. The current value of the cash index means less and less the further out in time the expiration of the VIX option. The difference between the current cash index and the price of futures contracts settling further out in time can be wide and more pronounced than in the case of a European style equity index option. These future expectations of volatility can also change suddenly and dramatically. Therefore, in addition to margin requirements given in this manual, brokerage firms require additional margin or apply an alternative margin treatment in respect of calendar spreads composed of VIX options.

Long Put or Long Call

- 9 months or less until expiration

OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> • Equity • ETF, ETN • Narrow Based Index • Broad Based Index • Volatility Index 	Pay for each put or call in full.	Pay for each put or call in full. Cash need not be deposited in excess of put or call cost.	None required (no loan value).

Long Put or Long Call

- more than 9 months until expiration

OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> • Equity • ETF • Narrow Based Index • Broad Based Index • Volatility Index <p>Note: The ETF or index underlying an option must be equity based in order to be eligible for purchase on margin.</p> <p>For all other option types, long put or long call must be paid for in full.</p>	Pay for each put or call in full.	<p><u>Listed</u> 75% of the total cost of the option.</p> <p><u>OTC</u> 75% of the intrinsic value (in-the-money amount) of the option plus 100% of the amount by which the option's purchase price exceeds its intrinsic value. OTC option must be American style exercise and be guaranteed by the carrying broker-dealer.</p>	<p><u>Listed</u> 75% of option market value.</p> <p><u>OTC</u> 75% of the intrinsic value of the option.</p> <p>Note that in either case, the option has no value for margin purposes when time remaining to expiration reaches 9 months.</p>

Short Put or Short Call			
OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF or ETN – tracking a narrow based index •Narrow Based Index •Volatility Index 	<p><u>Put</u> Deposit cash or cash equivalents equal to aggregate exercise price or appropriate escrow agreement.</p> <p><u>Call</u> Deposit underlying security or appropriate escrow agreement.</p> <p>----- Whether put or call, sale proceeds not released until deposit is made.</p>	<p>100% of option proceeds plus 20% of underlying security / index value less out-of-the-money amount, if any, to a minimum for calls of option proceeds plus 10% of the underlying security / index value, and a minimum for puts of option proceeds plus 10% of the put's exercise price.</p>	<p>100% of option market value plus 20% of underlying security / index value less out-of-the-money amount, if any, to a minimum for calls of option market value plus 10% of the underlying security / index value, and a minimum for puts of option market value plus 10% of the put's exercise price.</p>
<ul style="list-style-type: none"> •Leveraged ETF or ETN tracking a narrow based index¹ •Leveraged ETN – tracking a broad based index 	Same as above.	<p>Apply the above requirement, except increase the 20% and 10% multipliers by the ETF or ETN leverage factor.</p> <p>Examples</p> <p><u>1.5x Leverage Factor</u> $20\% \times 1.5 = 30\%$ $10\% \times 1.5 = 15\%$</p> <p><u>2.0x Leverage Factor</u> $20\% \times 2 = 40\%$ $10\% \times 2 = 20\%$</p>	<p>Apply the above requirement, except increase the 20% and 10% multipliers by the ETF or ETN leverage factor.</p>

¹ Cboe Regulatory Circular RG09-97 prescribes heightened margin requirements for options on leveraged ETFs. Heightened maintenance margin requirements for ETFs are also prescribed in RG09-97. See <https://cdn.cboe.com/resources/regulation/circulars/regulatory/RG09-097.pdf>

<ul style="list-style-type: none"> •ETF - tracking a broad based index •Broad Based Index 	<p><u>Put</u> Deposit cash or cash equivalents² equal to aggregate exercise price, or an escrow agreement³ for a short index put option.</p> <p><u>Call</u> Deposit escrow agreement for a short index call option.</p> <p>-----</p> <p>Whether put or call, sale proceeds not released until deposit is made.</p>	<p>100% of option proceeds plus 15% of underlying index value less out-of-the-money amount, if any, to a minimum for calls of option proceeds plus 10% of the underlying index value, and a minimum for puts of option proceeds plus 10% of the put's exercise price.</p>	<p>100% of option market value plus 15% of underlying index value less out-of-the-money amount, if any, to a minimum for calls of option market value plus 10% of the underlying index value, and a minimum for puts of option market value plus 10% of the put's exercise price.</p>
<ul style="list-style-type: none"> •Leveraged ETF – tracking a broad based index¹ 	<p>Same as above.</p>	<p>Apply the above requirement, except increase the 15% and 10% multipliers by the ETF or ETN leverage factor.</p> <p>Examples</p> <p><u>1.5x Leverage Factor</u> $15\% \times 1.5 = 22.5\%$ $10\% \times 1.5 = 15\%$</p> <p><u>2.0x Leverage Factor</u> $15\% \times 2 = 30\%$ $10\% \times 2 = 20\%$</p>	<p>Apply the above requirement, except increase the 15% and 10% multipliers by the ETF or ETN leverage factor.</p>

² Acceptable as cash equivalents (pursuant to Regulation T of the Board of Governors of the Federal Reserve System) are securities issued or guaranteed by the United States or its agencies, negotiable bank certificates of deposit, banker's acceptances issued by banking institutions in the United States and payable in the United States, or money market mutual funds.

³ The term "escrow agreement" (pursuant to Exchange Rules), when used in connection with non cash-settled call or put options carried short, means any agreement issued in a form acceptable to the Exchange under which a bank holding the underlying security (in the case of a call option) or required cash, cash equivalents or a combination thereof (in the case of a put option), is obligated to deliver to the creditor (in the case of a call option) or accept from the creditor (in the case of a put option) the underlying security against payment of the exercise price in the event the call or put is assigned an exercise notice.

The term "escrow agreement," when used in connection with cash-settled call or put options, stock index warrants, currency index warrants or currency warrants carried short, means any agreement issued in a form acceptable to the Exchange under which a bank holding cash, cash equivalents, one or more qualified equity securities or a combination thereof in the case of a call option or warrant; or cash, cash equivalents or a combination thereof in the case of a put option or warrant, is obligated (in the case of an option) to pay the creditor the exercise settlement amount in the event an option is assigned an exercise notice or (in the case of a warrant) the funds sufficient to purchase a warrant sold short in the event of a buy-in.

Short Put and Short Call			
OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF, ETN 	Deposit an escrow agreement for each option. See requirement for short put or short call.	For the same underlying security, short put or short call requirement whichever is greater, plus the option proceeds of the other side.	For the same underlying security, short put or short call requirement whichever is greater, plus the option market value of the other side.
<ul style="list-style-type: none"> •Narrow Based Index •Broad Based Index •Volatility Index 	Deposit an escrow agreement for each option. See requirement for short put or short call.	For the same underlying index with the same index multiplier, short put or short call requirement, whichever is greater, plus the option proceeds of the other side.	For the same underlying index with the same index multiplier, short put or short call requirement, whichever is greater, plus the option market value of the other side.

Put Spread, Call Spread

This section applies to equivalent long and short positions in different call option series, different put option series, or combinations thereof, that collectively have a limited risk / reward profile, and meet the following conditions:

- (A) all options must have the same underlying security or instrument,
- (B) all options must be either all American style or all European style,
- (C) all options must be either all listed or all OTC,
- (D) within option type(s), the long and short options must have equal aggregate underlying contract values and
- (E) the short option(s) must expire on or before the expiration date of the long option(s).

It is important to remember that under certain circumstances, it is possible that the spread margin held by a carrying broker-dealer could become insufficient to cover the assignment obligation on the short option if the long side is a European style option that cannot be exercised, and that option is trading at a discount to its intrinsic value.

OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF, ETN •Narrow Based Index •Broad Based Index •Volatility Index 	<p>Only spreads composed of European style exercise, cash-settled index options, all of which expire at the same time, are permitted in the cash account.</p> <p>For spreads meeting the above conditions, deposit and <u>maintain</u> cash or cash equivalents equal to the spread's maximum potential loss, if any, as detailed on page 39. Long option(s) must be paid for in full. Proceeds from short option sale(s) may be applied.</p> <p>An escrow agreement representing cash or cash equivalents may be deposited in lieu of requirement.</p>	<p>For spreads meeting the above conditions, the lesser of the amount required for the short option(s) as detailed on page 39, or the spread's maximum potential loss, if any, as detailed on page 39. Long option(s) must be paid for in full. Proceeds from short option sale(s) may be applied.⁴</p>	<p>Initial spread requirement must be maintained.</p>

⁴ In the case of any calendar spread (or calendar spread component) involving European style options, it is important to remember that, should the short option be assigned, the long option cannot be exercised. It is possible that proceeds from a sale of the long option may not cover a cash debit from assignment. This is because the price of the long option reflects the market's view of what the price of the underlying will be when the option is exercisable.

Long Box Spread

- long call and short put with the same exercise price ("buy side") coupled with a long put and short call with the same exercise price ("sell side")
- buy side exercise price must be lower than the sell side exercise price
- all options must expire at the same time

OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF, ETN •Narrow Based Index •Broad Based Index •Volatility Index 	<p>Only long box spreads composed of European style exercise, cash-settled index options, all of which expire at the same time, are permitted in the cash account.</p> <p>For the same underlying instrument and, as applicable, the same index multiplier; the long sides must be paid for in full. Proceeds from sale of short options may be applied.</p>	<p>For the same underlying instrument and, as applicable, the same index multiplier; the maximum potential loss, if any, as detailed on page 49. Long option(s) must be paid for in full. Proceeds from short option sale(s) may be applied.</p> <p><EXCEPTION></p> <p>Long box spreads composed of European style options.</p> <p>50% of the difference, in aggregate, between exercise prices. Proceeds from short option sales may be applied. Long box spread may be valued at an amount not to exceed 100% of the difference, in aggregate, between the exercise prices.</p>	<p>Initial long box spread requirement must be maintained.</p>

Short Box Spread

- long call and short put with the same exercise price ("buy side") coupled with a long put and short call with the same exercise price ("sell side")
- buy side exercise price must be higher than the sell side exercise price
- all options must expire at the same time

OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> • Equity • ETF, ETN • Narrow Based Index • Broad Based Index • Volatility Index 	<p>Only short box spreads composed of European style exercise, cash-settled index options, all of which expire at the same time, are permitted in the cash account.</p> <p>For the same underlying instrument and, as applicable, the same index multiplier, deposit and maintain cash or cash equivalents equal to the difference, in aggregate, between exercise prices. Net proceeds from sale of short options may be applied.</p> <p>Alternatively, an escrow agreement representing cash and / or cash equivalents may be deposited.</p>	<p>For the same underlying instrument and, as applicable, the same index multiplier; the maximum potential loss, if any, as detailed on page 51.</p>	<p>Initial short box spread requirement must be maintained.</p>

Short Put and Short Underlying			
OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF, ETN 	Not permitted	No requirement on short put. Short sale proceeds plus 50% requirement on the short sale in the underlying.	<p>No requirement on short put. Short underlying position requirement is 100% of stock market value plus:</p> <ul style="list-style-type: none"> • for short underlying position with market value of less than \$5.00 per share, the greater of \$2.50 per share or 100% of market value • for short underlying position with market value of \$5.00 or more per share, the greater of \$5.00 per share or 30% of market value. <p>Any amount (aggregate) by which the exercise price of the put exceeds the market price of the short underlying position must be added to the short underlying position maintenance requirement, and to the short underlying position initial requirement for purposes of determining if excess Reg. T equity exists.</p>
<ul style="list-style-type: none"> •Narrow Based Index •Broad Based Index 	Not permitted.	None required on short put. Short sale proceeds plus 50% requirement on short underlying stock basket.	None required on short put. On short underlying position (stock basket), same maintenance requirement as for short underlying position. (see above).

Short Call and Long Underlying			
OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF, ETN 	Pay for long underlying position in full. No requirement on short call.	None required on short call. 50% requirement on long underlying position.	None required on short call. 25% requirement on long underlying position. Long underlying position must be valued at lower of current market value or call exercise price for margin equity purposes.
<ul style="list-style-type: none"> •Narrow Based Index •Broad Based Index 	Not permitted.	None required on short call. 50% requirement on long underlying stock basket. Long underlying stock basket must be based on the same index underlying the index option and have a market value at least equal to the aggregate current index value.	None required on short call. 25% requirement on long underlying stock basket. Long underlying (stock basket) must be valued at lower of current market value or call exercise price for margin equity purposes

Short Index Call and Long ETF			
OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Narrow Based Index •Broad Based Index 	Not permitted.	None required on short call. 50% requirement on long ETF position. Long ETF must be based on the same index underlying the index option and have a market value at least equal to the aggregate current index value. Long index mutual funds are also permitted. ETNs, leveraged ETFs and leveraged index mutual funds are not permitted.	None required on short call. 25% requirement on long ETF position. Long ETF position must be valued at lower of current market value or call exercise price for margin equity purposes.

Short Call and Long Marginable Convertibles

- the convertible security must be immediately convertible or exchangeable and may not expire before the short call; no money payable upon exchange or conversion

OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
Equity	Pay for the convertible security in full.	None required on short call. 50% requirement on convertible security.	None required on short call. 25% requirement on convertible security. The convertible security must be valued at lower of current market value or call exercise price for margin equity purposes.

Short Call and Long Marginable Stock Warrants

- permitted even if money payable upon exercise or conversion

OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
Equity	Not permitted.	None required on short call. 100% requirement on warrants plus any amount by which exercise price of warrants exceeds option exercise price. Warrants may not expire before the short call.	None required on short call. 100% requirement on warrants plus any amount by which exercise price of warrants exceeds option exercise price. ⁵ Warrants must be valued at lower of current market value or call exercise price.

⁵ Regulation T allows loan value on a long, marginable stock warrant. However, pursuant to Cboe rules, when a long warrant is spread with a short call option, the warrant may contribute no equity to the account (no loan value). Therefore, the higher Exchange maintenance requirement becomes both the initial and maintenance requirement.

Long Put and Long Underlying ⁶			
OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF, ETN •Narrow Based Index •Broad Based Index 	Pay for each position in full.	Pay for put in full. 50% requirement on long underlying position (long stock basket in the case of an index option).	None required on put (no loan value). Provided long put is American style exercise, long underlying position requirement is the lower of: 1) 10% of the put exercise price plus 100% of any out-of-the-money amount, or 2) 25% of long underlying position market value.

Long Call and Short Underlying ⁶			
OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF, ETN •Narrow Based Index •Broad Based Index 	Not permitted.	Pay for call in full. Short sale proceeds plus 50% requirement on the short underlying position (short stock basket in the case of an index option).	<p>None required on call (no loan value). Provided long call is American style exercise, 100% of short underlying position market value plus the lower of:</p> <p>1) 10% of the call exercise price plus 100% of any out-of-the-money amount, or</p> <p>2) • for short underlying position with market value of less than \$5.00 per share, the greater of \$2.50 per share or 100% of short underlying position market value</p> <p>• for short underlying position with market value of \$5.00 or more per share, the greater of \$5.00 per share or 30% of short underlying position market value.</p>

⁶ Permitted only for options on individual stocks, ETFs, ETNs and index options that are equity based. For index options (equity based), a qualified stock basket may serve as an underlying component for the following strategies: Long Put and Long Underlying; Long Call and Short Underlying; Conversion; Reverse Conversion; and Collar. Also permitted with OTC options, however, the OTC option must be guaranteed by the carrying broker-dealer. When an option is part of a hedge strategy, loan value on the option is not permitted.

Conversion⁶

- long put and long underlying with short call
- put and call must have same expiration and exercise price

OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF, ETN 	Pay for put and long underlying position in full. No requirement on short call.	Pay for put in full. No requirement on short call. 50% requirement on long underlying position.	<p>None required on put (no loan value) or call. Provided options are American style exercise, requirement on long underlying position is 10% of the exercise price.</p> <p>Long underlying position must be valued at lower of current market value or call exercise price for margin equity purposes.</p>
<ul style="list-style-type: none"> •Narrow Based Index •Broad Based Index 	Not permitted.	Pay for put in full. No requirement on short call. 50% requirement on long underlying position (stock basket).	<p>None required on put (no loan value) or call. Provided options are American style exercise, requirement on long underlying position (stock basket) is 10% of the exercise price.</p> <p>Long underlying position (stock basket) must be valued at lower of current market value or call exercise price for margin equity purposes.</p>

Reverse Conversion⁶

- long call and short underlying with short put
- put and call must have same expiration and exercise price

OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF, ETN •Narrow Based Index •Broad Based Index 	Not permitted.	<p>Pay for call in full. No requirement on short put. Short sale proceeds plus 50% requirement on the short sale in the underlying.</p> <p>If the exercise price is less than the sale price of the underlying and the call is American style exercise:</p> <p>Pay for call in full. No requirement on short put. Short sale proceeds plus 10% of the exercise price on the short sale in the underlying.</p>	<p>None required on put (no loan value) or call. Provided options are American style exercise, short stock requirement is 10% of the exercise price. Otherwise, apply requirement from "Short Put and Short Underlying."</p> <p>Any amount (aggregate) by which the exercise price of the put exceeds the market price of the short underlying position must be added to the short underlying position maintenance requirement, and to the short underlying position initial requirement for the purpose of determining if excess Reg. T equity exists.</p>

Collar⁶

- long put and long underlying with short call
- put and call must have same expiration
- put exercise price lower than call exercise price

OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF, ETN 	Pay for put and long underlying position in full. No requirement on short call.	Pay for put in full. No requirement on short call. 50% requirement on long underlying position.	<p>None required on put (no loan value) or call. Provided options are American style exercise, requirement on long underlying position is the lower of: 1) 10% of the put exercise price plus any put out-of-the-money amount, or 2) 25% of the call exercise price.</p> <p>Long underlying position must be valued at lower of current market value or call exercise price for margin equity purposes.</p>
<ul style="list-style-type: none"> •Narrow Based Index •Broad Based Index 	Not permitted.	Pay for put in full. No requirement on short call. 50% requirement on long underlying position (stock basket).	<p>None required on put (no loan value) or call. Provided options are American style exercise, requirement on long underlying position (stock basket) is the lower of: 1) 10% of the put exercise price plus any put out-of-the-money amount, or 2) 25% of the call exercise price.</p> <p>Long underlying position (stock basket) must be valued at lower of current market value or call exercise price for margin equity purposes.</p>

FLEX OPTIONS

The above margin requirements also apply to FLEX Options, with some exceptions which are reflected below (Put Spreads, Call Spreads, Short Put and Short Call).

Note that FLEX Options can be offset against conventional options. Also, FLEX Options are allowed to be offset with FLEX Options or conventional options having a different exercise style (American vs. European). Additionally, index FLEX Options are allowed to be offset with index Flex Options or conventional index options with a different settlement value determination (open vs. close).

Put Spread, Call Spread			
<ul style="list-style-type: none"> •FLEX vs. FLEX •FLEX vs. Conventional 			
OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF, ETN 	Not permitted.	<p>Long side must expire with or after the short side.</p> <p>Spreads between different exercise styles (American vs. European) permitted.</p> <p>For the same underlying instrument and, as applicable, the same index multiplier; the maximum potential loss, if any, as detailed on page 39. Long option(s) must be paid for in full. Proceeds from short option sale(s) may be applied.⁷</p>	Initial spread requirement must be maintained.

⁷ It is important to remember that under certain circumstances, it is possible that the spread margin held by a carrying broker-dealer could become insufficient to cover the assignment obligation on the short option if the long side is a European style option that can not be exercised, and that option is trading at a discount to its intrinsic value.

Put Spread, Call Spread

- FLEX vs. FLEX
- FLEX vs. Conventional

OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
Index	<p>Both long and short side must be European style exercise, cash settled index options</p> <p>Long must expire with the short.</p> <p>For the same underlying instrument and, as applicable, the same index multiplier; deposit and <u>maintain</u> cash or cash equivalents equal to the maximum potential loss, if any, as detailed on page X. Long option(s) must be paid for in full. Proceeds from short option sale(s) may be applied.</p> <p>Alternatively, an escrow agreement representing cash and / or cash equivalents may be deposited.</p>	<p>See above (Equity, ETF).</p> <p>Also, long and short may have different settlement value determinations (open vs. close). If settlement value determinations differ, and both positions expire on the same day, each position must be margined separately two days prior to expiration.</p>	<p>See above (Equity, ETF).</p> <p>Also, long and short may have different settlement value determinations (open vs. close). If settlement value determinations differ, and both positions expire on the same day, each position must be margined separately two days prior to expiration.</p>

Short Put and Short Call

- FLEX vs. FLEX
- FLEX vs. Conventional

OPTION TYPE	CASH ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT INITIAL REQUIREMENT	MARGIN ACCOUNT MAINTENANCE REQUIREMENT
<ul style="list-style-type: none"> •Equity •ETF, ETN 	Deposit an escrow agreement for each option. See requirement for short equity put or call.	<p>Different exercise styles are permitted (American vs. European).</p> <p>For the same underlying security, short put or short call requirement whichever is greater, plus the option proceeds of the other side.</p>	For the same underlying security, short put or short call requirement whichever is greater, plus the option market value of the other side.
Index	See above.	<p>See above (Equity, ETF).</p> <p>Also, the options may have different settlement value determinations (open vs. close). If settlement value determinations differ, and both positions expire on the same day, each position must be margined separately two days prior to expiration.</p>	<p>See above (Equity, ETF).</p> <p>Also, the options may have different settlement value determinations (open vs. close). If settlement value determinations differ, and both positions expire on the same day, each position must be margined separately two days prior to expiration.</p>

SAMPLE CALCULATIONS FOR OPTIONS

With the exception of the examples concerning maintenance margin on pages 5 through 22, the examples that follow only reflect the margin treatment on the illustrated positions at the time they are established. **The requirements covered in this manual are minimums based on Exchange (as well as other self-regulatory organization) rules. Brokerage firms may have higher requirements.** The examples do not demonstrate the impact of brokerage charges, such as commissions and interest, or the effect of adverse market movements, which could result in losses and maintenance margin calls. **It should be noted that current option market value must be used in lieu of option proceeds when calculating maintenance margin requirements.** The inclusion of any particular strategy in this publication is solely the result of either industry practice or related inquiries received by the Exchange. No statement in this publication should be construed as an endorsement of a specific strategy.

Long Options	
<ul style="list-style-type: none"> •listed or OTC •9 months or less until expiration 	
<ul style="list-style-type: none"> •Equity •ETF, ETN •Broad Based Index •Narrow Based Index •Volatility Index 	<p>Long 1 Dec 125 call at 5</p> <p>(expiring in 6 months, any style exercise)</p> <p>Underlying at 128.50</p> <p><i>Margin Calculation:</i> $5 \times 100 = \\$500.00$</p> <p><i>Margin Requirement:</i> \$500.00</p> <p><i>SMA⁸ Debit or Margin Call:</i> \$500.00</p> <p><i>Explanation:</i> Long options with 9 months or less until expiration must be paid for in full.</p> <p style="text-align: center;">* * * * *</p> <p>Long 1 index Nov 430 put at 5.50</p> <p>(expiring in 6 months, any style exercise)</p> <p>Underlying at 433.35</p> <p><i>Margin Calculation:</i> $5.5 \times 100 = \\$550.00$</p> <p><i>Margin Requirement:</i> \$550.00</p> <p><i>SMA Debit or Margin Call:</i> \$550.00</p> <p><i>Explanation:</i> Long options with 9 months or less to expiration must be paid for in full.</p>

⁸ SMA = "Special Memorandum Account" provided in Federal Reserve Board Regulation T Section 220.5

Long Options⁹

- listed
- more than 9 months until expiration

- Equity
- ETF
- Broad Based Index
- Narrow Based Index
- Volatility Index

Long 1 Dec 80 call at 12

(expiring in 18 months, any style exercise)

Underlying at 78

Margin Calculation: $75\% \times 12 \times 100 = \900.00

Margin Requirement: \$900.00

SMA Debit or Margin Call: \$900.00

Explanation: Initial (maintenance) margin requirement for long listed options with more than 9 months until expiration is 75% of the premium (market value). Option has no value for margin purposes when time remaining to expiration reaches 9 months.

* * * * *

Long 1 Jun 1325 call at 16.80

(expiring in 20 months, any style exercise)

Underlying at 1290

Margin Calculation: $75\% \times 16.80 \times 100 = \$1,260.00$

Margin Requirement: \$1,260.00

SMA Debit or Margin Call: \$1,260.00

Explanation: Initial (maintenance) margin requirement for long listed options with more than 9 months until expiration is 75% of the premium (market value). Option has no value for margin purposes when time remaining to expiration reaches 9 months.

⁹ Only equity options, and equity based ETF, index and volatility index options are eligible. **NOTE:** Despite being permitted by Exchange rules, a clearing / carrying broker-dealer may elect not to allow purchases of options on margin. Check with a clearing / carrying broker-dealer regarding its policies.

Long Options ¹⁰	
<ul style="list-style-type: none"> •listed •more than 9 months until expiration 	
<ul style="list-style-type: none"> •Broad Based Index •Narrow Based Index •Volatility Index 	<p>Long 1 reduced value index Dec 42.5 put at 2 (expiring in 2 years)</p> <p><i>Margin Calculation:</i> $75\% \times 2 \times 100 = \\150.00</p> <p><i>Margin Requirement:</i> \$150.00</p> <p><i>SMA Debit or Margin Call:</i> \$150.00</p> <p><i>Explanation:</i> Initial (maintenance) margin requirement for long , listed options with more than 9 months until expiration is 75% of the premium (market value). Option has no value for margin purposes when time remaining to expiration reaches 9 months.</p>

¹⁰ Only equity options, and equity based ETF, index and volatility index options are eligible. **NOTE:** Despite being permitted by Exchange rules, a clearing / carrying broker-dealer may elect not to allow purchases of options on margin. Check with a clearing / carrying broker-dealer regarding its policies.

Long Options

- OTC
- more than 9 months until expiration

- Equity
- ETF
- Broad Based Index
- Narrow Based Index
- Volatility Index

Note: The index or ETF underlying an option must be equity based in order to be eligible for purchase on margin.

If not equity based, the purchase must be paid for in full.

Long 1 Jun 75 call at 4.50

(expiring in 12 months, American style exercise only and must be guaranteed by the carrying broker-dealer)

Underlying at 79

Margin Calculation: $(75\% \times 4) + (4.50 - 4.00) \times 100 = \350.00

Margin Requirement: \$350.00

SMA Debit or Margin Call: \$350.00

Explanation: For an OTC option with 9 months or more until expiration, the initial margin requirement is 75% of the option's intrinsic value (in-the-money amount) plus 100% of the amount by which the option's purchase price exceeds its intrinsic value. In addition to having more than 9 months to expiration, OTC options must be American style exercise and be guaranteed by the carrying broker-dealer in order to be eligible for margin. The maintenance margin requirement is 75% of the option's intrinsic value. Option has no value for margin purposes when time remaining to expiration reaches 9 months.

* * * * *

Long 1 Jun 665 call at 11

(expiring in 12 months, American style exercise only, and must be guaranteed by the carrying broker-dealer)

Underlying at 667.34

Margin Calculation: $(75\% \times 2.34) + (11 - 2.34) \times 100 = \$1,041.50$

Margin Requirement: \$1,041.50

SMA Debit or Margin Call: \$1,041.50

Explanation: For an OTC option with 9 months or more until expiration, the initial margin requirement is 75% of the option's intrinsic value (in-the-money amount) plus 100% of the amount by which the option's purchase price exceeds its intrinsic value. In addition to having more than 9 months to expiration, OTC options must be American style exercise and be guaranteed by the carrying broker-dealer in order to be eligible for margin. The maintenance margin requirement is 75% of the option's intrinsic value. Option has no value for margin purposes when time remaining to expiration reaches 9 months.

Long Options

- OTC
- more than 9 months until expiration

continued

Long 1 Jun 665 call at 13

(expiring in 12 months, American style exercise only,
and must be guaranteed by the carrying broker-dealer)

Underlying at 663.50

Margin Calculation: $(75\% \times 0) + (13 - 0) \times 100 = \$1,300.00$

Margin Requirement: \$1,300.00

SMA Debit or Margin Call: \$1,300.00

Explanation: For an OTC option with 9 months or more until expiration, the initial margin requirement is 75% of the option's intrinsic value (in-the-money amount) plus 100% of the amount by which the option's purchase price exceeds its intrinsic value. In addition to having more than 9 months to expiration, OTC options must be American style exercise and be guaranteed by the carrying broker-dealer in order to be eligible for margin. The maintenance margin requirement is 75% of the option's intrinsic value. Option has no value for margin purposes when time remaining to expiration reaches 9 months. In this example the OTC option is not in-the-money. OTC options that are at- or out-of-the-money must be paid for in full.

Short Put

- Equity
- ETF or ETN – tracking a narrow based index
- ETN – tracking a broad based index
- Narrow Based Index
- Volatility Index

Short 1 Sep 80 put at 2

(out-of-the-money)

Underlying at 95

$$\begin{array}{rcl}
 \text{Margin Calculation: } 2 \times 100 & = & \$ 200.00 \\
 20\% \times 95 \times 100 & = & 1,900.00 \\
 (95 - 80) \times 100 & = & \underline{(1,500.00)} \\
 & & 600.00
 \end{array}$$

$$\begin{array}{rcl}
 \text{Therefore, minimum applies: } 2 \times 100 & = & \$ 200.00 \\
 10\% \times 80 \times 100 & = & \underline{800.00} \\
 & & 1,000.00
 \end{array}$$

Margin Requirement: \$1,000.00

SMA Debit or Margin Call: \$1,000.00 - \$200.00 = \$800.00

Explanation: The margin requirement is 100% of the option proceeds plus 20% of the underlying security value less out-of-the-money amount, if any, to a minimum **for puts** of option proceeds plus 10% of the put's exercise price. The minimum formula (10%) requirement applies in this example because it is the greater of the basic or minimum. The proceeds from the short option sale (\$200) may be applied.

* * * * *

Short 1 Jan 20 put at 1.50

(in-the-money)

Underlying at 19.50

$$\begin{array}{rcl}
 \text{Margin Calculation: } 1.50 \times 100 & = & \$ 150.00 \\
 20\% \times 19.50 \times 100 & = & \underline{390.00} \\
 & & 540.00
 \end{array}$$

$$\begin{array}{rcl}
 \text{Minimum Margin Calculation: } 1.50 \times 100 & = & \$ 150.00 \\
 10\% \times 20 \times 100 & = & \underline{200.00} \\
 & & 350.00
 \end{array}$$

Margin Requirement: \$540.00

SMA Debit or Margin Call: \$540.00 - \$150.00 = \$390.00

Explanation: The margin requirement is 100% of the option proceeds plus 20% of the underlying security value less out-of-the-money amount, if any, to a minimum **for puts** of option proceeds plus 10% of the put's exercise price. The basic formula (20%) requirement applies in this example because it is the greater of the basic or minimum. The proceeds from the short option sale (\$150) may be applied.

- Leveraged ETF or ETN – tracking a narrow based index¹
- Leveraged ETN – tracking a broad based index

Short 1 Mar 725 put at 3.00

(out-of-the-money)

Underlying at 970.00

ETF leverage factor = **2.0x**

Margin Calculation: $3 \times 100 =$ \$ 300.00
 $20\% \times 2.0 \times 970 \times 100 =$ 38,800.00
 $(970 - 725) \times 100 =$ (24,500.00)
 14,600.00

Therefore, minimum applies: $3 \times 100 =$ \$ 300.00
 $10\% \times 2.0 \times 725 \times 100 =$ 14,500.00
 14,800.00

Margin Requirement: \$14,800.00

SMA Debit or Margin Call: \$14,800.00 - \$300.00 = \$14,500.00

Explanation: The margin requirement is 100% of the option proceeds plus 40% of the underlying security value less out-of-the-money amount, if any, to a minimum **for puts** of option proceeds plus 20% of the put's exercise price. (40% = 20% x 2.0 leverage factor, 20% = 10% x 2.0 leverage factor.) The minimum formula (20%) requirement applies in this example because it is the greater of the basic or minimum. The proceeds from the short option sale (\$300) may be applied.

* * * * *

Short 1 Apr 400 put at 15.50

(in-the-money)

Underlying at 390.70

ETF leverage factor = **3.0x**

Margin Calculation: $15.50 \times 100 =$ \$ 1,550.00
 $20\% \times 3.0 \times 390.70 \times 100 =$ 23,442.00
 24,992.00

Minimum Margin Calculation: $15.50 \times 100 =$ \$ 1,550.00
 $10\% \times 3.0 \times 400 \times 100 =$ 12,000.00
 13,550.00

Margin Requirement: \$24,992.00

SMA Debit or Margin Call: \$24,992.00 - \$1,550.00 = \$23,442.00

Explanation: The margin requirement is 100% of the option proceeds plus 60% of the underlying security value less out-of-the-money amount, if any, to a minimum **for puts** of option proceeds plus 30% of the put's exercise price. (60% = 20% x 3.0 leverage factor, 30% = 10% x 3.0 leverage factor.) The basic formula (60%) requirement applies in this example because it is the greater of the basic or minimum. The proceeds from the short option sale (\$1,550) may be applied.

Short Put

- ETF – tracking a broad based index
- Broad Based Index

Short 1 Oct 410 put at .10

(Out-of-the-money)

Underlying at 445.35

Margin Calculation:

.10 x 100 =	\$ 10.00
15% x 445.35 x 100 =	6,680.25
(445.35 - 410) x 100 =	<u>(3,535.00)</u>
	3,155.25

Therefore, minimum applies:

.10 x 100 =	\$ 10.00
10% X 410 X 100 =	<u>4,100.00</u>
	4,110.00

Margin Requirement: \$4,110.00

SMA Debit or Margin Call: \$4,110.00 - \$10.00 = \$4,100.00

Explanation: The margin requirement is 100% of the option proceeds plus 15% of the underlying index value less out-of-the-money amount, if any, to a minimum **for puts** of option proceeds plus 10% of the put's exercise price. The minimum formula (10%) requirement applies in this example because it is the greater of the basic or minimum. The proceeds from the short option sale (\$10) may be applied.

* * * * *

Short 1 Dec 430 put at 7.80

(Out-of-the-money)

Underlying at 433.35

Margin Calculation:

7.80 x 100 =	\$ 780.00
15% x 433.35 x 100 =	6,500.25
(433.35 - 430) x 100 =	<u>(335.00)</u>
	6,945.25

Margin Requirement: \$6,945.25

SMA Debit or Margin Call: \$6,945.25 - \$780.00 = \$6,165.25

Explanation: The margin requirement is 100% of the option proceeds plus 15% of the underlying index value less out-of-the-money amount, if any, to a minimum **for puts** of option proceeds plus 10% of the put's exercise price. The proceeds from the short option sale (\$780) may be applied. The minimum does not apply because the minimum would be a lesser requirement (\$780.00 + (10% x 430 x 100) = \$5,080.00).

Short Put	
<ul style="list-style-type: none"> ●Broad Based Index 	<p>Short 1 reduced value broad-based index Dec 45 put at 2.85</p> <p>(In-the-money, expiring in 2 years)</p> <p>Underlying at 43.34</p> <p><i>Margin Calculation:</i> $2.85 \times 100 =$ \$285.00 $15\% \times 43.34 \times 100 =$ <u>650.10</u> 935.10</p> <p><i>Margin Requirement:</i> \$935.10</p> <p><i>SMA Debit or Margin Call:</i> $\\$935.10 - \\$285.00 = \\$650.10$</p> <p><i>Explanation:</i> The margin requirement is 100% of the option proceeds plus 15% of the underlying index value. The proceeds from the short option sale (\$285) may be applied. The minimum does not apply because the minimum would be a lesser requirement ($\\$285.00 + (10\% \times 45 \times 100) = \\735.00).</p>
<ul style="list-style-type: none"> ●Leveraged ETF – tracking a broad based index¹ 	<p>Short 1 Oct 390 put at 4.00</p> <p>(Out-of-the-money)</p> <p>Underlying at 460.00</p> <p>ETF leverage factor = 1.5x</p> <p><i>Margin Calculation:</i> $4 \times 100 =$ \$ 400.00 $15\% \times 1.5 \times 460 \times 100 =$ 10,350.00 $(460 - 390) \times 100 =$ <u>(7,000.00)</u> 3,750.00</p> <p>Therefore, minimum applies: $4 \times 100 =$ \$ 400.00 $10\% \times 1.5 \times 390 \times 100 =$ <u>5,850.00</u> 6,250.00</p> <p><i>Margin Requirement:</i> \$6,250.00</p> <p><i>SMA Debit or Margin Call:</i> $\\$6,250.00 - \\$400.00 = \\$5,850.00$</p> <p><i>Explanation:</i> The margin requirement is 100% of the option proceeds plus 22.5% of the underlying security value less out-of-the-money amount, if any, to a minimum for puts of 100% of the option proceeds plus 15% of the put's exercise price. (22.5% = 15% x 1.5 leverage factor, 15% = 10% x 1.5 leverage factor.) The proceeds from the short option sale (\$400) may be applied. The minimum formula (15%) requirement applies in this example because it is the greater of the basic or minimum.</p>

Short Call

- Equity
- ETF or ETN – tracking a narrow based index
- ETN – tracking a broad based index
- Narrow Based Index
- Volatility Index

Short 1 Nov 120 call at 8.40

(in-the-money)

Underlying at 128.50

Margin Calculation: $8.40 \times 100 =$ \$ 840.00
 $20\% \times 128.50 \times 100 =$ 2,570.00
 3,410.00

Margin Requirement: \$3,410.00

SMA Debit or Margin Call: \$3,410.00 - \$840.00 = \$2,570.00

Explanation: The margin requirement is 100% of the option proceeds plus 20% of the underlying security value. The proceeds from the short option sale (\$840) may be applied. For in-the-money **call** options, it is not necessary to calculate a requirement with the minimum formula. A higher requirement will always result from the basic formula.

* * * * *

Short 1 Feb 30 call at .05

(Out-of-the-money)

Underlying at 26.38

Margin Calculation: $.05 \times 100 =$ \$ 5.00
 $20\% \times 26.38 \times 100 =$ 527.60
 $(30 - 26.38) \times 100 =$ (362.00)
 170.60

Therefore, minimum applies: $.05 \times 100 =$ \$ 5.00
 $10\% \times 26.38 \times 100 =$ 263.80
 268.80

Margin Requirement: \$268.80

SMA Debit or Margin Call: \$268.80 - \$5.00 = \$263.80

Explanation: The margin requirement is 100% of the option proceeds plus 20% of the underlying security value less out-of-the-money amount, if any, to a minimum **for calls** of 100% of the option proceeds plus 10% of the underlying security value. The proceeds from the short option sale (\$5) may be applied. The minimum formula (10%) requirement applies in this example because it is the greater of the basic or minimum.

- Leveraged ETF or ETN – tracking a narrow based index¹
- Leveraged ETN – tracking a broad based index

Short 1 Dec 810 call at 10.10

(in-the-money)

Underlying at 815.50

ETF leverage factor = **2.0x**

$$\begin{array}{rcl}
 \text{Margin Calculation: } 10.10 \times 100 & = & \$ 1,010.00 \\
 20\% \times 2.0 \times 815.50 \times 100 & = & \underline{32,620.00} \\
 & & 33,630.00
 \end{array}$$

Margin Requirement: \$33,630.00

SMA Debit or Margin Call: \$33,630.00 - \$1,010.00 = \$32,620.00

Explanation: The margin requirement is 100% of the option proceeds plus 40% of the underlying security value. (40% = 20% x 2.0 leverage factor.) The proceeds from the short option sale (\$1,010) may be applied. For in-the-money **call** options, it is not necessary to calculate a requirement with the minimum formula. A higher requirement will always result from the basic formula.

* * * * *

Short 1 Oct 1,250 call at 2.00

(Out-of-the-money)

Underlying at 1,050.30

ETF leverage factor = **1.5x**

$$\begin{array}{rcl}
 \text{Margin Calculation: } 2 \times 100 & = & \$ 200.00 \\
 20\% \times 1.5 \times 1,050.30 \times 100 & = & 31,509.00 \\
 (1,250 - 1,050.30) \times 100 & = & \underline{(19,970.00)} \\
 & & 11,739.00
 \end{array}$$

$$\begin{array}{rcl}
 \text{Therefore, minimum applies: } 2 \times 100 & = & \$ 200.00 \\
 10\% \times 1.5 \times 1,050.30 \times 100 & = & \underline{15,754.50} \\
 & & 15,954.50
 \end{array}$$

Margin Requirement: \$15,954.50

SMA Debit or Margin Call: \$15,954.50 - \$200.00 = \$15,754.50

Explanation: The margin requirement is 100% of the option proceeds plus 30% of the underlying security value less out-of-the-money amount, if any, to a minimum **for calls** of 100% of the option proceeds plus 15% of the underlying security value. (30% = 20% x 1.5 leverage factor, 15% = 10% x 1.5 leverage factor.) The proceeds from the short option sale (\$200) may be applied. The minimum formula (15%) requirement applies in this example because it is the greater of the basic or minimum.

Short Call

- ETF – tracking a broad based index
- Broad Based Index

Short 1 Nov 430 call at 8.70

(In-the-money)

Underlying at 433.35

Margin Calculation: $100 \times 8.70 = \$ 870.00$
 $15\% \times 433.35 \times 100 = \underline{6,500.25}$
 7,370.25

Margin Requirement: \$7,370.25

SMA Debit or Margin Call: \$7,370.25 - \$870.00 = \$6,500.25

Explanation: The margin requirement is 100% of the option proceeds plus 15% of the underlying index value. The proceeds from the short option sale (\$870) may be applied. For in-the-money **call** options, it is not necessary to calculate a requirement with the minimum formula. A higher requirement will always result from the basic formula.

* * * * *

Short 1 reduced value broad-based index Dec 45 call at 1.35

(Out-of-the-money, expiring in 18 months)

Underlying at 43.34

Margin Calculation: $1.35 \times 100 = \$135.00$
 $15\% \times 43.34 \times 100 = 650.10$
 $(45 - 43.34) \times 100 = \underline{(166.00)}$
 619.10

Margin Requirement: \$619.10

SMA Debit or Margin Call: \$619.10 - \$135.00 = \$484.10

Explanation: The margin requirement is 100% of the option proceeds plus 15% of the underlying index value less out-of-the-money amount, if any, to a minimum **for calls** of 100% of the option proceeds plus 10% of the index value. The proceeds from the short option sale (\$135) may be applied. The minimum does not apply because the minimum would be a lesser requirement (\$135.00 + \$433.40 = \$568.40).

Short Call	
<ul style="list-style-type: none"> •ETF – tracking a broad based index •Broad Based Index 	<p>Short 1 reduced value broad-based index Dec 370 call at 12.85</p> <p>(In-the-money, expiring in 2 years)</p> <p>Underlying at 378.50</p> <p><i>Margin Calculation:</i> $12.85 \times 100 = \\$1,285.00$ $15\% \times 378.50 \times 100 = \underline{5,677.50}$ 6,962.50</p> <p><i>Margin Requirement:</i> \$6,962.50</p> <p><i>SMA Debit or Margin Call:</i> \$6,962.50 - \$1,285.00 = \$5,677.50</p> <p><i>Explanation:</i> The margin requirement is 100% of the option proceeds plus 15% of the underlying index value. The proceeds from the short option sale (\$1,285) may be applied. For in-the-money call options, it is not necessary to calculate a requirement with the minimum formula. A higher requirement will always result from the basic formula.</p>
<ul style="list-style-type: none"> •Leveraged ETF – tracking a broad based index¹ 	<p>Short 1 Oct 450 call at 3.00</p> <p>(Out-of-the-money)</p> <p>Underlying at 410.00</p> <p>ETF leverage factor = 1.5x</p> <p><i>Margin Calculation:</i> $3 \times 100 = \\$ 300.00$ $15\% \times 1.5 \times 410 \times 100 = 9,225.00$ $(450 - 410) \times 100 = \underline{(4,000.00)}$ 5,525.00</p> <p>Therefore, minimum applies: $3 \times 100 = \\$ 300.00$ $10\% \times 1.5 \times 410 \times 100 = \underline{6,150.00}$ 6,450.00</p> <p><i>Margin Requirement:</i> \$6,450.00</p> <p><i>SMA Debit or Margin Call:</i> \$6,450.00 - \$300.00 = \$6,150.00</p> <p><i>Explanation:</i> The margin requirement is 100% of the option proceeds plus 22.5% of the underlying security value less out-of-the-money amount, if any, to a minimum for calls of 100% of the option proceeds plus 15% of the underlying security value. (22.5% = 15% x 1.5 leverage factor, 15% = 10% x 1.5 leverage factor.) The proceeds from the short option sale (\$300) may be applied. The minimum formula (15%) requirement applies in this example because it is the greater of the basic or minimum.</p>

Spread Maximum Potential Loss Computation

The examples below demonstrate how to determine a spread's maximum potential loss. First, compute the intrinsic value of the options at price points for the underlying security or instrument that are set to correspond to every exercise price present in the spread. Then, net the intrinsic values at each price point. The maximum potential loss is the greatest loss, if any, from among the results.

	<u>Underlying Price</u>		
	75	85	
Long 10 XYZ Jan2021 75 call	0	10,000	} <div> <ul style="list-style-type: none"> •Basic two-legged spread. •No loss computed. •No margin required - pay for long option(s) in full. •Proceeds from short option(s) may be applied. </div>
Short 10 XYZ Jan2021 85 call	0	0	
Totals	0	10,000	

	<u>Underlying Price</u>			
	45	55	60	
Long 10 XYZ Apr2021 45 call	0	10,000	15,000	} <div> <ul style="list-style-type: none"> •Non-symmetrical butterfly spread – strike intervals not equal. •No loss computed. •No margin required – pay for long option(s) in full. •Proceeds from short option(s) may be applied. </div>
Short 20 XYZ Apr2021 55 call	0	0	(10,000)	
Long 10 XYZ Apr2021 60 call	0	0	0	
Totals	0	10,000	5,000	

	<u>Underlying Price</u>				
	60	70	85	90	
Long 5 LMN Jun2021 60 put	0	0	0	0	} <div> <ul style="list-style-type: none"> •Non-symmetrical iron condor spread. •\$5,000 loss computed. •Margin requirement: \$5,000 and long option(s) must be paid for in full. •Proceeds from short option(s) may be applied. </div>
Short 5 LMN Jun2021 70 put	(5,000)	0	0	0	
Short 10 LMN Jun2021 85 call	0	0	0	(5,000)	
Long 10 LMN Jun2021 90 call	0	0	0	0	
Totals	(5,000)	0	0	(5,000)	

When multiple two-legged spreads are grouped together to form complex spreads and all components do not have the same expiration, the maximum potential loss computation may only be valid for whatever time frame the complex spread as originally structured remains intact. In such cases, a margin requirement determined through the maximum potential loss methodology may be a point in time analysis only. Therefore, depending on how varied expirations are arranged, one may not be able to take a "set it and forget it" mindset.

While the maximum potential loss computation may be applied to multiple two-legged option spreads grouped together to form a complex spread, it should be understood that if all component option series do not expire at the same time, disruption due to assignment, exercise and/or expiration might result in triggering a margin requirement on what remains of the original spread.

Consider the following examples.

- **All expirations are not the same. Maximum potential loss only valid while original spread remains intact.**

	<u>Underlying Price</u>			
	60	70	85	90
Long 5 LMN Jun2021 60 put	0	0	0	0
Short 5 LMN Jun2021 70 put	(5,000)	0	0	0
Short 10 LMN July 2021 85 call	0	0	0	(5,000)
Long 10 LMN July 2021 90 call	0	0	0	0
Totals	(5,000)	0	0	(5,000)

- Non-symmetrical iron condor spread.
- All expirations are **not** the same.
- \$5,000 loss computed while spread as originally structured remains intact.
- Margin requirement: \$5,000 and long option(s) must be paid for in full.
- Proceeds from short option(s) may be applied.

- Scenario - maximum loss is incurred on the put spread via assignment / exercise at June expiration
- The loss would be \$5,000. \$5,000 margin requirement is depleted.
- The July call spread remains intact and is at risk of a significant upside move in the underlying.
- Maximum risk on the July call spread is \$5,000. Another \$5,000 in margin is now required.

- **All expirations are not the same. Maximum potential loss static.**

	<u>Underlying Price</u>			
	60	70	85	90
Long 5 LMN Jun2021 60 put	0	0	0	0
Short 5 LMN Jun2021 70 put	(5,000)	0	0	0
Short 10 LMN Jun2021 85 call	0	0	0	(5,000)
Long 10 LMN July 2021 90 call	0	0	0	0
Totals	(5,000)	0	0	(5,000)

- Non-symmetrical iron condor spread.
- All expirations are **not** the same.
- \$5,000 loss computed.
- Margin requirement: \$5,000 and long option(s) must be paid for in full.
- Proceeds from short option(s) may be applied.

- Scenario - maximum loss is incurred on the put spread via assignment / exercise at June expiration.
- The loss would be \$5,000. \$5,000 margin requirement is depleted.
- The short June calls expire.
- Long July calls remain, but no additional margin requirement is incurred.

- **All expirations are not the same. Maximum potential loss static.**

	Underlying Price		
	45	55	60
Long 10 XYZ Apr2021 45 call	0	10,000	15,000
Short 10 XYZ Mar2021 55 call	0	0	(5,000)
Short 10 XYZ May2021 55 call	0	0	(5,000)
Long 10 XYZ Jun2021 60 call	0	0	0
Totals	0	10,000	5,000

- Non-symmetrical butterfly spread – strike intervals not equal.
- All expirations are not the same.
- No loss computed.
- No margin required – pay for long option(s) in full.
- Proceeds from short option(s) may be applied.

- Scenario - maximum loss is incurred on the April / March call spread via assignment / exercise at March expiration.
- The gain would be \$5,000.
- The June / May call spread remains and a \$5,000 margin requirement is triggered.
- The \$5,000 gain is available to cover the margin requirement.

The maximum potential loss computation as demonstrated in this manual depicts spread margin requirements that are minimums based on Cboe rules. **FINRA and or brokerage firms may require higher margin and/or impose restrictions.** For example, all components might be required to have the same expiration. Or, there may be a requirement that all short options have an expiration that is before or with the long option having the nearest expiration. Moreover, a brokerage firm may not allow a margin reduction at all for certain combinations of spreads.

Put Spread

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index
- Volatility Index

Long 1 Nov 250 put at 3
Short 1 Nov 240 put at .95

(Long expires with short)

Underlying at 255

Maximum Potential Loss Computation:

	<u>Underlying Price</u>	
	240	250
Long 1 Nov 250 put	\$1,000	0
Short 1 Nov 240 put	<u>0</u>	<u>0</u>
	\$1,000	0

Margin Requirement: \$300.00

SMA Debit or Margin Call: \$300.00 - \$95.00 = \$205.00

Explanation: No loss is found by doing the maximum potential loss computation. The long side must be paid for in full. The margin requirement is \$300. The proceeds from the short option sale (\$95) may be applied.

* * * * *

Long 1 index Dec 425 put at 6.40
Short 1 index Dec 430 put at 7.80

(Long expires with short)

Underlying at 433.35

Maximum Potential Loss Computation:

	<u>Underlying Price</u>	
	425	430
Long 1 Dec 425 put	0	0
Short 1 Dec 430 put	<u>(\$500)</u>	<u>0</u>
	(\$500)	0

Margin Requirement: \$500.00 + \$640 = \$1,140.00

SMA Debit or Margin Call: \$1,140.00 - \$780.00 = \$360.00

Explanation: A \$500 loss is found by doing the maximum potential loss computation. In addition, the long side must be paid for in full. The margin requirement is \$1,140. The proceeds from the short option sale (\$780) may be applied.

Put Spread

continued

Long 1 reduced value index Dec 42.5 put at 2
Short 1 reduced value index Dec 45 put at 2.90

(Long expires with short in 18 months)

Underlying at 43.34

Maximum Potential Loss Computation:

	<u>Underlying Price</u>	
	<u>42.5</u>	<u>45</u>
Long 1 Dec 42.5 put	0	0
Short 1 Dec 45 put	<u>(\$250)</u>	<u>0</u>
	(\$250)	0

Margin Requirement: \$250.00 + \$200.00 = \$450.00

SMA Debit or Margin Call: \$450.00 - \$290.00 = \$160.00

Explanation: A \$250 loss is found by doing the maximum potential loss computation. In addition, the long side must be paid for in full. The margin requirement is \$450. The proceeds from the short option sale (\$290) may be applied.

Put Spread

- standard contract vs. reduced value contract

- Broad Based Index

Long 1 index Sept 430 put at 7.90
Short 10 reduced value index Dec 42.5 puts at 2

(Long expiring in 5 months, short expiring in 18 months)

Underlying at 433.40, 43.34

Maximum Potential Loss Computation: - not applicable -

	<u>Underlying Price</u>	
	<u>430</u>	<u>42.5</u>
Long 1 Sept 430 put	0	\$500
Short 10 Dec 42.5 put	<u>\$(250)</u>	<u>0</u>
	(250)	500
 <i>Margin Calculation:</i>		
7.90 x 100 x 1 =		\$ 790.00
2 x 100 x 10 =		2,000.00
15% x 43.34 x 100 x 10 =		6,501.00
(43.34 - 42.5) x 100 x 10 =		<u>(840.00)</u>
		8,451.00

Margin Requirement: \$8,451.00

SMA Debit or Margin Call: \$8,451.00 - \$2,000.00 = \$6,451.00

Explanation: For the same underlying index covering the same total aggregate underlying value (e.g., 10 XSP = 1 SPX), reduced value index contracts may offset regular index contracts for spreads. However, in order to qualify for spread treatment under Exchange Rules, the long side must expire with or after the short. If not, both sides must be treated as separate positions. Therefore, in this example the long side must be paid for in full because it expires after the short and a short option requirement calculation is applied to the 10 short reduced value index Dec 42.5 puts. The proceeds from the short option sale (\$2,000) may be applied.

Call Spread

- Equity
- ETF, ETN

Long 1 Nov 125 call at 3.80
Short 1 Nov 120 call at 8.40

(Long expires with short)

Underlying at 128.50

Maximum Potential Loss Computation:

	<u>Underlying Price</u>	
	<u>125</u>	<u>120</u>
Long 1 Nov 125 call	0	0
Short 1 Nov 120 call	<u>(\$500)</u>	<u>0</u>
	(\$500)	0

Margin Requirement: \$500.00 + \$380.00 = \$880.00

SMA Debit or Margin Call: \$880.00 - \$840.00 = \$40.00

Explanation: A \$500 loss is found by doing the maximum potential loss computation. In addition, the long side must be paid for in full. The margin requirement is \$880. The proceeds from the short option sale (\$840) may be applied.

* * * * *

Long 1 Mar 70 call at 5
Short 1 Jun 70 call at 8

(Long expires before short)

Underlying at 75

Margin Calculation:

5 x 100 =	\$ 500.00
8 x 100 =	800.00
20% x 75 x 100 =	<u>1,500.00</u>
	2,800.00

Margin Requirement: \$2,800.00

SMA Debit or Margin Call: \$2,800.00 - \$800.00 = \$2,000.00

Explanation: In order to qualify for spread treatment under Exchange rules, the long side must expire with or after the short. If not, both sides must be treated as separate positions. Therefore, in this example the long side must be paid for in full and a short option requirement calculation is applied to the short Jun 70 call. The proceeds from the short option sale (\$800) may be applied.

Call Spread	
<ul style="list-style-type: none"> •Broad Based Index •Narrow Based Index •Volatility Index 	<p>Long 1 Nov 425 call at 13.10 Short 1 Dec 430 call at 12.20</p> <p>(Long expires before short)</p> <p>Underlying at 433.35</p> <p><i>Margin Calculation:</i> 13.10 x 100 = \$1,310.00 12.20 x 100 = 1,220.00 15% x 433.35 x 100 = <u>6,500.25</u> 9,030.25</p> <p><i>Margin Requirement:</i> \$9,030.25</p> <p><i>SMA Debit or Margin Call:</i> \$9,030.25 - \$1,220.00 = \$7,810.25</p> <p><i>Explanation:</i> In order to qualify for spread treatment under Exchange Rules, the long side must expire with or after the short. If not, both sides must be treated as separate positions. Therefore, in this example the long side must be paid for in full and a short option requirement calculation is applied to the short index Dec 430 call. The proceeds from the short option sale (\$1,220) may be applied.</p>

Call Spread

•reduced value contract vs. standard contract

•Broad Based Index

Long 10 reduced value index Dec 45 calls at 1.35
Short 1 index Sept. 450 call at .25

(Long expiring in 18 months, short expiring in 3 months)

Underlying at 43.34, 433.40

Maximum Potential Loss Computation:

	<u>Underlying Price</u>	
	<u>45</u>	<u>450</u>
Long 10 Dec 45 call	0	0
Short 1 Nov 450 call	<u>0</u>	<u>0</u>
	0	0

Margin Requirement: $\$1.35 \times 100 \times 10 = \$1,350.00$

SMA Debit or Margin Call: $\$1,350.00 - \$25.00 = \$1,325.00$

Explanation: For the same underlying index covering the same total aggregate underlying value (e.g., 10 XSP = 1 SPX), reduced value index contracts may offset regular index contracts for spreads. No loss is found by doing the maximum potential loss computation. The long side must be paid for in full. The margin requirement is \$1,350. The proceeds from the short option sale (\$25) may be applied.

Short Put and Short Call

- Equity
- ETF or ETN – tracking a narrow based index
- ETN – tracking a broad based index
- Narrow Based Index
- Volatility Index

Short 1 Dec 90 call at 7
Short 1 Dec 90 put at 3.70

Underlying at 92.63

Margin Calculation: Call

$$\begin{aligned} 7 \times 100 &= \$ 700.00 \\ 20\% \times 92.63 \times 100 &= \underline{1,852.60} \\ &2,552.60 \end{aligned}$$

Put

$$\begin{aligned} 3.70 \times 100 &= \$ 370.00 \\ 20\% \times 92.63 \times 100 &= 1,852.60 \\ (92.63 - 90) \times 100 &= \underline{(263.00)} \\ &\$1,959.60 \end{aligned}$$

Margin Requirement: \$2,552.60 + \$370.00 = \$2,922.60

SMA Debit or Margin Call: \$2,922.60 – (\$700.00 + \$370.00) = \$1,852.60

Explanation: In this example, for the same underlying security, the margin is the requirement on the short put or call, whichever is greater, plus the option proceeds on the other side. The proceeds from both option sales (\$1,070) may be applied.

- ETF – tracking a broad based index
- Broad Based Index

Short 1 Nov 435 put at 7.20
Short 1 Nov 435 call at 5.50

Underlying at 433.35

Margin Calculation: Put

$$\begin{aligned} 7.20 \times 100 &= \$ 720.00 \\ 15\% \times 433.35 \times 100 &= \underline{6,500.25} \\ &7,220.25 \end{aligned}$$

Call

$$\begin{aligned} 5.5 \times 100 &= \$ 550.00 \\ 15\% \times 433.35 \times 100 &= 6,500.25 \\ (435 - 433.35) \times 100 &= \underline{(165.00)} \\ &6,885.25 \end{aligned}$$

Margin Requirement: \$7,220.25 + \$550.00 = \$7,770.25

SMA Debit or Margin Call: \$7,770.25 - (\$550.00 + \$720.00) = \$6,500.25

Explanation: For the same underlying index with the same index multiplier, the margin is the requirement on the short put or call, whichever is greater, plus the option proceeds on the other side. The proceeds from both short option sales (\$1,270) may be applied.

Short Put and Short Call

•Broad Based Index

Short 1 reduced value index Dec 45 put at 2.85

Short 1 reduced value index Dec 45 call at 1.35

Underlying at 43.34

Margin Calculation: Put

$$2.85 \times 100 = \$285.00$$

$$15\% \times 43.34 \times 100 = \underline{650.10}$$

$$935.10$$

Call

$$1.35 \times 100 = \$135.00$$

$$15\% \times 43.34 \times 100 = 650.10$$

$$(45 - 43.34) \times 100 = \underline{(166.00)}$$

$$619.10$$

Margin Requirement: $\$935.10 + \$135.00 = \$1,070.10$

SMA Debit or Margin Call: $\$1,070.10 - (\$285.00 + \$135.00) = \650.10

Explanation: For the same underlying index covering the same total aggregate underlying value (e.g., 10 XSP = 1 SPX), reduced value index contracts may offset a regular index contract for straddles. For the same underlying index, same index multiplier, the margin is the requirement on the short put or call, whichever is greater, plus the option proceeds on the other side. The proceeds from both short option sales (\$420) may be applied to the initial margin requirement.

Short Put and Short Underlying

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index

Short 100 shares at 255
Short 1 Nov 250 put at 3

Margin Calculation: $150\% \times 255 \times 100 = \$38,250.00$

Margin Requirement: \$38,250.00

SMA Debit or Margin Call: $\$38,250.00 - \$25,500.00 - \$300.00 = \$12,450.00$

Explanation: No margin required on the put; 150% requirement on the short stock. The stock short sale proceeds (\$25,500) and option sale proceeds (\$300) may be applied. Any amount (aggregate) by which the exercise price of the put exceeds the market price of the stock must be added to the stock initial requirement for the purpose of determining if excess Reg. T equity exists.

Short Call and Long Underlying

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index

Long 100 shares at 92.38
Short 1 Dec 90 call at 7

Margin Calculation: $50\% \times 92.38 \times 100 = \$4,619.00$

Margin Requirement: \$4,619.00

SMA Debit or Margin Call: $\$4,619.00 - \$700.00 = \$3,919.00$

Explanation: No margin required on the call because it is covered by the underlying shares; 50% requirement on the underlying security. For purposes of computing margin equity the long underlying security position must be valued at the lower of its current market value or the call exercise price. The proceeds from the short option sale (\$700) may be applied.

Short Index Call and Long ETF	
<ul style="list-style-type: none"> •Broad Based Index •Narrow Based Index 	<p>Long 10,111 ETF shares at 36.10 Short 1 Dec 3600 call at 45</p> <p>Current Index Value: 3,650 Aggregate current index value: $3,650 \times \\$100 = \\$365,000.00$ Long ETF aggregate market value: $10,111 \times 36.10 = \\$365,007.10$</p> <p><i>Margin Calculation:</i> $50\% \times 36.10 \times 10,111 = \\$182,503.55$</p> <p><i>Margin Requirement:</i> \$182,503.55</p> <p><i>SMA Debit or Margin Call:</i> $\\$182,503.55 - \\$4,500.00 = \\$178,003.55$</p> <p><i>Explanation:</i> Long ETF must be based on the same index underlying the short index call. Long ETF aggregate market value must be at least equal to the aggregate current index value. Not permitted in a cash account.</p> <p>No margin required on the short call if the above conditions are met. 50% requirement on the Long ETF. For purposes of computing margin equity, the long ETF must be valued at the lower of the current market value or the call exercise price equivalent. The proceeds from the short option sale (\$4,500) may be applied.</p>

COMPLEX SPREADS

Interval between exercise prices of component two-leg put spreads and/or call spreads may differ.

With respect to box spreads, loan value is allowed for long box spreads meeting the definition in Exchange Rule 10.3. To be eligible for loan value, all option series that compose the box spread must expire at the same time and must have European style expiration. If eligible, loan value of 50% of the difference in the exercise prices may be extended.

Box spreads may be carried in the cash account provided that all option series that compose the box spread expire at the same time, have European style expiration and are cash settled. For long box spreads, the net debit must be paid for in full. For short box spreads, cash or cash equivalents equal to the difference in the exercise prices (aggregate) must be held in the account.

Long Box Spread – Loan Value Utilized

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index
- Volatility Index

Note: To be eligible for loan value, options must be European style. For listed equity, ETF and ETN options, this would only be possible through a FLEX option in a margin account.

Long 1 Nov 535 call at 19.40
 Short 1 Nov 545 call at 12.20
 Long 1 Nov 545 put at 5.30
 Short 1 Nov 535 put at 3

Underlying at 550

Maximum Potential Loss Computation:

	<u>Underlying Price</u>	
	<u>535</u>	<u>545</u>
Long 1 Nov 535 call	0	\$1,000
Short 1 Nov 545 call	0	0
Long 1 Nov 545 put	\$1,000	0
Short 1 Nov 535 put	<u>0</u>	<u>0</u>
	1,000	1,000

Margin Calculation: $50\% \times (545 - 535) \times 100 = \500.00

Margin Requirement: \$500.00

SMA Debit or Margin Call: $\$950.00 - (\$1,000.00 - \$500.00) = \450.00

Calls

$19.40 \times 100 = \$1,940.00$

$12.20 \times 100 = 1,220.00$

Puts

$5.30 \times 100 = \$ (530.00)$

$3 \times 100 = \underline{300.00}$
 (950.00)

Explanation: To be eligible for loan value, all components must be European style and expire at the same time. The margin requirement is 50% of the box spread's value at expiration. Because loan value (50% of the box spread's value at expiration) is \$500.00 in this example, the debit balance minus the loan value equals the amount of the SMA debit or margin call, or \$450.00. The long call and short put have the same exercise price, and the long put and short call have the same exercise price.

Cash Account. Permitted only with European style, cash settled index options, all of which expire at the same time. The requirement is to pay for the net debit in full.

Long Box Spread – Loan Value Not Utilized

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index
- Volatility Index

Long 1 Sep 40 call at 15.40
 Short 1 Sep 50 call at 7.20
 Long 1 Sep 50 put at 1.75
 Short 1 Sep 40 put at .40

Underlying at 50

Maximum Potential Loss Computation:

	<u>Underlying Price</u>	
	<u>40</u>	<u>50</u>
Long 1 Sep 40 call	0	\$1,000
Short 1 Sep 50 call	0	0
Long 1 Sep 50 put	\$1,000	0
Short 1 Sep 40 put	<u>0</u>	<u>0</u>
	1,000	1,000

Margin Requirement: \$1,715.00

SMA Debit or Margin Call: \$1,715.00 – \$760.00 = \$955.00

Calls

15.40 x 100 = \$(1,540.00)
 7.20 x 100 = \$ 720.00

Puts

1.75 x 100 = (175.00)
 .40 x 100 = 40.00
 (1,715.00) 760.00

Explanation: No loss is found by doing the maximum potential loss computation. The long sides must be paid for in full. The margin requirement is \$1,715. The proceeds from the short option sales (\$760) may be applied.

Cash Account. Permitted only with European style, cash settled index options, all of which expire at the same time. The requirement is the same, pay for debit in full.

Short Box Spread

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index
- Volatility Index

Short 1 Nov 50 call at 17.30
 Long 1 Nov 60 call at 8.40
 Short 1 Nov 60 put at 1.25
 Long 1 Nov 50 put at .30

Underlying at 66

Maximum Potential Loss Computation:

	<u>Underlying Price</u>	
	<u>50</u>	<u>60</u>
Short 1 Nov 50 call	0	\$(1,000)
Long 1 Nov 60 call	0	0
Short 1 Nov 60 put	\$(1,000)	0
Long 1 Nov 50 put	<u>0</u>	<u>0</u>
	(1,000)	(1,000)

Margin Requirement: \$1,000.00 + \$870.00 = \$1,870.00

SMA Debit or Margin Call: \$1,870.00 - \$1,855.00 = \$15.00

Calls

17.30 x 100 = \$1,730.00
 8.40 x 100 = (840.00)

Puts

1.25 x 100 = 125.00
 .30 x 100 = (30.00)
 \$ (870.00) 1,855.00

Explanation: A \$1,000 loss is found by doing the maximum potential loss computation. The long sides must be paid for in full. The margin requirement is \$1,870. The proceeds from the short option sales (\$1,855) may be applied.

Cash Account. Permitted only with European style, cash-settled options, all of which expire at the same time. The calculation of the margin requirement is the same and the requirement must be met with cash or cash equivalents.

Long Butterfly Spread – Puts

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index
- Volatility Index

Long 1 Nov 540 put at 5.60
 Short 2 Nov 550 puts at 7.20
 Long 1 Nov 555 put at 9.80

Underlying at 550

Maximum Potential Loss Computation:

	<u>Underlying Price</u>		
	<u>540</u>	<u>550</u>	<u>555</u>
Long 1 Nov 540 put	0	0	0
Short 2 Nov 550 puts (\$2,000)		0	0
Long 1 Nov 555 put	<u>1,500</u>	<u>\$500</u>	<u>0</u>
	(500)	500	0

Margin Requirement: \$2,040.00

SMA Debit or Margin Call: \$2,040.00 - \$1,440.00 = \$600.00

9.80 x 100 =	\$(980.00)	
(7.20 x 100) x 2 =		\$1,440.00
5.60 x 100 =	<u>(560.00)</u>	
	(1,540.00)	

Explanation: A \$500 loss is found by doing the maximum potential loss computation. The long sides must be paid for in full. The margin requirement is \$2,040. The proceeds from the short option sales (\$1,440) may be applied.

Cash Account. Permitted only with European style, cash settled options, all of which expire at the same time. The calculation of the margin requirement is the same and the requirement must be met with cash or cash equivalents.

Long Butterfly Spread – Calls

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index
- Volatility Index

Long 1 Nov 545 call at 12.40
 Short 2 Nov 550 calls at 8.80
 Long 1 Nov 565 call at 2

Underlying at 550

Maximum Potential Loss Computation:

	<u>Underlying Price</u>		
	<u>545</u>	<u>550</u>	<u>565</u>
Long 1 Nov 545 call	0	\$500	\$2,000
Short 2 Nov 550 calls	0	0	(3,000)
Long 1 Nov 565 call	<u>0</u>	<u>0</u>	<u>0</u>
	0	500	(1,000)

Margin Requirement: \$1,000.00 + \$1,440.00 = \$2,440.00

SMA Debit or Margin Call: \$2,440.00 - \$1,760.00 = \$680.00

$$\begin{array}{rcl}
 12.40 \times 100 & = & \$ (1,240.00) \\
 8.80 \times 100 \times 2 & = & \$ 1,760.00 \\
 2 \times 100 & = & \underline{(\ 200.00)} \\
 & & (1,440.00)
 \end{array}$$

Explanation: A \$1,000 loss is found by doing the maximum potential loss computation. The long sides must be paid for in full. The margin requirement is \$2,440. The proceeds from the short option sales (\$1,760) may be applied.

Cash Account. Permitted only with European style cash settled options, all of which expire at the same time. The calculation of the margin requirement is the same and the requirement must be met with cash or cash equivalents.

Long Condor Spread – Puts

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index
- Volatility Index

Long 1 May 1050 put at 47.10
 Short 1 May 1075 put at 55.70
 Short 1 May 1100 put at 66.30
 Long 1 May 1125 put at 85.40

Underlying at 1160

Maximum Potential Loss Computation:

	<u>Underlying Price</u>			
	<u>1050</u>	<u>1075</u>	<u>1100</u>	<u>1125</u>
Long 1 May 1050 put	0	0	0	0
Short 1 May 1075 put	\$(2,500)	0	0	0
Short 1 May 1100 put	(5,000)	\$(2,500)	0	0
Long 1 May 1125 put	<u>7,000</u>	<u>5,000</u>	<u>\$2,500</u>	<u>0</u>
	0	2,500	2,500	0

Margin Requirement: \$13,250.00

SMA Debit or Margin Call: \$13,250.00 - \$12,200.00 = \$1,050.00

47.10 x 100 =	\$(4,710.00)	
55.70 x 100 =		\$5,570.00
66.30 x 100 =		6,630.00
85.40 x 100 =	<u>(8,540.00)</u>	
	(13,250.00)	12,200.00

Explanation: No loss is found by doing the maximum potential loss computation. The long sides must be paid for in full. The margin requirement is \$13,250. The proceeds from the short option sales (\$12,200) may be applied.

Cash Account. Permitted only with European style, cash settled options, all of which expire at the same time. The requirement is the same; pay for debit in full.

Long Condor Spread – Calls

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index
- Volatility Index

Long 1 Sept 22.5 call at .45
 Short 1 Sept 25 call at .75
 Short 1 Sept 30 call at 2.75
 Long 1 Sept 32.5 call at 4.30

Underlying at 26.75

Maximum Potential Loss Computation:

	Underlying Price			
	22.5	25	30	32.5
Long 1 Sept 22.5 call	0	\$250	\$750	\$1,000
Short 1 Sept 25 call	0	0	(500)	(750)
Short 1 Sept 30 call	0	0	0	(250)
Long 1 Sept 32.5 call	0	0	0	0
	0	250	250	0

Margin Requirement: \$475.00

SMA Debit or Margin Call: \$475.00 - \$350.00 = \$125.00

.45 x 100 =	\$(45.00)	
.75 x 100 =		\$ 75.00
2.75 x 100 =		275.00
4.30 x 100 =	(430.00)	
	(475.00)	350.00

Explanation: No loss is found by doing the maximum potential loss computation. The long sides must be paid for in full. The margin requirement is \$475. The proceeds from the short option sales (\$350) may be applied.

Cash Account. Permitted only with European style, cash settled options, all of which expire at the same time. The requirement is the same; pay for debit in full.

Short Iron Butterfly Spread

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index
- Volatility Index

Long 1 Oct 16 put at .10
 Short 1 Oct 20 put at .20
 Short 1 Oct 20 call at 7.00
 Long 1 Oct 24 call at 4.00

Underlying at 26.75

Maximum Potential Loss Computation:

	<u>Underlying Price</u>			
	<u>16</u>	<u>20</u>	<u>20</u>	<u>24</u>
Long 1 Oct <u>16</u> put	0	0	0	0
Short 1 Oct <u>20</u> put	\$(400)	0	0	0
Short 1 Oct <u>20</u> call	0	0	0	\$(400)
Long 1 Oct <u>24</u> call	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	(400)	0	0	(400)

Margin Requirement: \$400.00 + \$410.00 = \$810.00

SMA Debit or Margin Call: \$810.00 – \$720.00 = \$90.00

.10 x 100 =	\$ (10.00)	
.20 x 100 =		\$ 20.00
7.00 x 100 =		700.00
4.00 x 100 =	<u>(400.00)</u>	<u>720.00</u>
	(410.00)	

Explanation: A \$400 loss is found by doing the maximum potential loss computation. The long sides must be paid for in full. The margin requirement is \$810. The proceeds from the short option sales (\$720) may be applied.

Cash Account. Permitted only with European style, cash settled options, all of which expire at the same time. The requirement is the same.

Short Iron Condor Spread

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index
- Volatility Index

Long 1 Sept 1000 put at 32.00
 Short 1 Sept 1025 put at 35.10
 Short 1 Sept 1150 call at 9.40
 Long 1 Sept 1175 call at 6.30

Underlying at 1060

Maximum Potential Loss Computation:

	<u>Underlying Price</u>			
	1000	1025	1150	1175
Long 1 Sept 1000 put	0	0	0	0
Short 1 Sept 1025 put	\$(2,500)	0	0	0
Short 1 Sept 1150 call	0	0	0	\$(2,500)
Long 1 Sept 1175 call	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	(2,500)	0	0	(2,500)

Margin Requirement: \$2,500.00 + \$3,830.00 = \$6,330.00

SMA Debit or Margin Call: \$6,330.00 - \$4,450.00 = \$1,880.00

32.00 x 100 =	\$(3,200.00)	
35.10 x 100 =		\$3,510.00
9.40 x 100 =		940.00
6.30 x 100 =	<u>(630.00)</u>	<u> </u>
	(3,830.00)	4,450.00

Explanation: A \$2,500 loss is found by doing the maximum potential loss computation. The long sides must be paid for in full. The margin requirement is \$6,330. The proceeds from the short option sale (\$4,450) may be applied.

Cash Account. Permitted only with European style, cash settled options, all of which expire at the same time. The requirement is the same.

MAINTENANCE MARGIN FOR HEDGED UNDERLYING POSITIONS

When initially established, an underlying security must be margined in accordance with Regulation T, regardless of any option hedge strategy that may be employed.

The following examples illustrate the Exchange's maintenance margin requirements on the underlying security component of hedge strategies recognized by Exchange rules. **Options must be American style. The long option component must be paid for in full and is not marginable.**

Long Put and Long Underlying	
<ul style="list-style-type: none"> •Equity •ETF, ETN •Broad Based Index •Narrow Based Index <p>Note: To be eligible, options must be American style. Generally, for listed broad and narrow based index options, this would only be possible through a FLEX option.</p>	<p>Long 100 XYZ at 103.50 Long 1 XYZ Nov 95 put</p> <p><i>Maintenance Margin Calculation:</i> XYZ a) $[(10\% \times 95) + (103.50 - 95)] \times 100 = \\$1,800.00$ b) $25\% \times 103.50 \times 100 = 2,587.50$</p> <p><i>Maintenance Margin Requirement:</i> \$1,800.00</p> <p><i>Explanation:</i> The maintenance margin requirement on a long position in an underlying security hedged with a long put is the lower of a) 10% of the put exercise price plus 100% of any out-of-the-money amount, or b) 25% of the market value of the underlying.</p>
Long Call and Short Underlying	
<ul style="list-style-type: none"> •Equity •ETF, ETN •Broad Based Index •Narrow Based Index <p>Note: To be eligible, options must be American style. Generally, for listed broad and narrow based index options, this would only be possible through a FLEX option.</p>	<p>Short 100 XYZ at 46 Long 1 XYZ Dec 50 call</p> <p><i>Maintenance Margin Calculation:</i> XYZ a) $[(110\% \times 50) + (50 - 46)] \times 100 = \\$5,900.00$ b) $130\% \times 46 \times 100 = 5,980.00$</p> <p><i>Maintenance Margin Requirement:</i> \$5,900.00</p> <p><i>Explanation:</i> The maintenance margin requirement on a short position in an underlying security hedged with a long call is the lower of a) 10% of the call exercise price plus 100% of any out-of-the-money amount, or b) the normal Exchange maintenance margin requirement (in this example, 30% of the market value of the underlying).¹¹</p>

¹¹ In addition, 100% of the short security current market value must be maintained at all times.

Conversion

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index

Note: To be eligible, options must be American style. Generally, for listed broad and narrow based index options, this would only be possible through a FLEX option.

Long 100 XYZ at 115
Short 1 May 110 call at 6.50
Long 1 May 110 put at 1.35

Maintenance Margin Calculation:

XYZ
 $10\% \times 110 \times 100 = \$1,100.00$

Maintenance Margin Requirement: \$1,100.00

Explanation: This example represents a long security position offset by a synthetic short security position (long put / short call). Option positions provide a minimum selling price for the long security position equal to the exercise price. The maintenance margin requirement on the long underlying position component of a conversion is 10% of the exercise price. Both options must have the same exercise price and expire at the same time. For margin purposes, the long underlying position must be valued at the lower of current market value or the call exercise price. In this example, the long underlying position would be valued at the call exercise price.

* * * * *

If the Conversion in the above example is established at the given prices, the initial margin required would be computed as follows:

Conversion (Initial Margin)

Long 100 XYZ at 115
Short 1 May 110 call at 6.50
Long 1 May 110 put at 1.35

Initial Margin Calculation:

Long Stock - $50\% \times 115 \times 100 =$	\$5,750.00
Covered Call -	0.00
Long Put - $1.35 \times 100 =$	<u>135.00</u>
	5,885.00

Initial Margin Requirement: \$5,885.00

***SMA Debit or Margin Call:* \$5,885.00 - \$650.00 = \$5,235.00**

Explanation: This example represents a long security position offset by a synthetic short security position. For initial margin purposes, the long underlying position component of a conversion must be treated as any other margin purchase. The option components must be treated as a long put and covered call.

Reverse Conversion

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index

Note: To be eligible, options must be American style. Generally, for listed broad and narrow based index options, this would only be possible through a FLEX option.

Short 100 XYZ at 115
Long 1 May 110 call at 6.50
Short 1 May 110 put at 1.35

Maintenance Margin Calculation:

Short XYZ
 $110\% \times 110 \times 100 = \$12,100.00$

Maintenance Margin Requirement: \$12,100.00

Explanation: This example represents a short security position offset by a synthetic long security position (long call / short put). Option positions provide a maximum close-out price for the short security position equal to the exercise price. The maintenance margin requirement on the short underlying position component of a reverse conversion is 10% of the exercise price.¹² Both options must have the same exercise price and expire at the same time. Any put in-the-money amount must be added to the short underlying position maintenance margin requirement.

* * * * *

If the Reverse Conversion in the above example is established at the given prices, the **initial** margin required would be computed as follows:

Reverse Conversion (Initial Margin)

Short 100 shares at 115
Long 1 May 110 call at 6.50
Short 1 May 110 put at 1.35

Initial Margin Calculation:

Short Stock - $150\% \times 115 \times 100 =$	\$17,250.00
Long Call -	650.00
Covered Put -	<u>0.00</u>
	17,900.00

Initial Margin Requirement: \$17,900.00

SMA Debit or Margin Call: \$17,900.00 - \$11,500.00 - \$135.00 = \$6,265.00

Explanation: This example represents a short security position offset by a synthetic long security position. For initial margin purposes, the short underlying position component of a reverse conversion must be treated as any other short sale. The option components must be treated as a long call and covered put. Any put in-the-money amount must be added to the short underlying position initial margin requirement for the purpose of determining if excess Reg. T equity exists.

¹² In addition, 100% of the short security current market value must be maintained at all times.

Reverse Conversion

•in-the-money put

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index

Note: To be eligible, options must be American style. Generally, for listed broad and narrow based index options, this would only be possible through a FLEX option.

Short 100 XYZ at 71.90
Long 1 XYZ Dec 75 call
Short 1 XYZ Dec 75 put

Maintenance Margin Calculation:

XYZ
 $110\% \times 75 \times 100 = \$8,250.00$

Put
 $(75 - 71.90) \times 100 = \310.00

Maintenance Margin Requirement: $\$8,250.00 + \$310.00 = \$8,560.00$

Explanation: This example represents a short security position offset by a synthetic long security position (long call / short put). Option positions provide a maximum close-out price for the short security position equal to the exercise price. The maintenance margin requirement on the short underlying position component of a reverse conversion is 10% of the exercise price.¹²² Both options must have the same exercise price and expire at the same time. Any put in-the-money amount must be added to the short underlying position maintenance requirement. In this example, the put is in-the-money and the put in-the-money amount is added to the short underlying position maintenance requirement.

Collar

- Equity
- ETF, ETN
- Broad Based Index
- Narrow Based Index

Note: To be eligible, options must be American style. Generally, for listed broad and narrow based index options (vs. underlying stock basket), this would only be possible through a FLEX option.

Long 100 XYZ at 31.75
Long 1 XYZ Dec 30 put
Short 1 XYZ Dec 35 call

Maintenance Margin Calculation:

XYZ
a) $(10\% \times 30) + 1.75 \times 100 = \475.00
b) $25\% \times 35 \times 100 = 875.00$

Maintenance Margin Requirement: $\$475.00$

Explanation: The maintenance margin requirement on a long underlying position position which is part of a collar is the **lower** of a) 10% of the put exercise price plus any out-of-the-money amount or b) 25% of the call exercise price. For margin purposes, the stock must be valued at the lower of market price or the call exercise price.

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