

Product Reference Guide

for Retail

NOT FDIC OR NCUSIF INSURED • NO BANK OR CREDIT UNION GUARANTEE • MAY LOSE VALUE
NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY • NOT A DEPOSIT

For producer use only. Not for use in sales solicitation.

FIXED ANNUITIES

| | SecureGain 3 | SecureGain 5 | SecureGain 7 |
|--------------------------|---|--|---|
| Issue ages | Up to age 90 | Up to age 89 | Up to age 88 |
| Tax qualifications | <ul style="list-style-type: none"> • 403(b) (Traditional & Roth) • 457(b) • IRA (Traditional, Roth, SEP, SIMPLE, Inherited) • Non-qualified • Inherited non-qualified | | |
| Purchase payments | Minimum: \$25,000 Additional purchase payments of at least \$2,000 accepted in first 60 days of contract | Minimum: \$25,000 Additional purchase payments of at least \$2,000 accepted in first 60 days of contract | Minimum: \$25,000 Additional purchase payments of at least \$2,000 accepted in first 60 days of contract |
| Early withdrawal charges | 3-year declining starting at 8% | 5-year declining starting at 8% | 7-year declining starting at 8% |
| Market value adjustment | Yes | Yes | Yes |
| Features | <ul style="list-style-type: none"> • Offers an initial three-year term • The initial interest rate for each purchase payment is guaranteed until the third contract anniversary. • 10% penalty-free withdrawal beginning first contract year • GMSV: 87.5% of purchase payments minus all prior withdrawals plus interest credited at a GMSV rate • Extended care and terminal illness waiver riders | <ul style="list-style-type: none"> • Offers an initial five-year term • The initial interest rate for each purchase payment is guaranteed until the fifth contract anniversary. • 10% penalty-free withdrawal beginning first contract year • GMSV: 87.5% of purchase payments minus all prior withdrawals plus interest credited at a GMSV rate • Extended care and terminal illness waiver riders | <ul style="list-style-type: none"> • Offers an initial seven-year term • The initial interest rate for each purchase payment is guaranteed until the seventh contract anniversary. • 10% penalty-free withdrawal beginning first contract year • GMSV: 87.5% of purchase payments minus all prior withdrawals plus interest credited at a GMSV rate • Extended care and terminal illness waiver riders |

FIXED-INDEXED ANNUITIES

| | American Landmark 3 | American Landmark 5 |
|--------------------------|---|--|
| Issue ages | 0-90 (qualified) 0-90 (non-qualified) 0-75 (inherited IRA) 0-75 (inherited non-qualified) | 0-89 (qualified) 0-89 (non-qualified) 0-75 (inherited IRA) 0-75 (inherited non-qualified) |
| Tax qualifications | <ul style="list-style-type: none"> • 403(b) (Traditional & Roth) • 457(b) • IRA (Traditional, Roth, SEP, SIMPLE, Inherited) • Non-qualified • Inherited non-qualified | |
| Purchase payments | Minimum: \$50,000 Additional purchase payments of at least \$2,000 accepted in first two months of contract | Minimum: \$10,000 Additional purchase payments of at least \$2,000 accepted in first year of contract |
| Early withdrawal charges | 3-year declining starting at 9% | 5-year declining starting at 9% |
| Market value adjustment | Yes | Yes |
| Features | <ul style="list-style-type: none"> • Indexed strategies: Point-to-point with cap, participation rate or participation rate lock • GMSV: 87.5% of purchase payments plus interest credited at a guaranteed minimum rate • 10% penalty-free withdrawal beginning first contract year • Extended care and terminal illness waiver riders | <ul style="list-style-type: none"> • Indexed strategies: Point-to-point with cap, participation rate or cap lock • GMSV: 87.5% of purchase payments plus interest credited at a guaranteed minimum rate • 10% penalty-free withdrawal beginning first contract year • Extended care and terminal illness waiver riders |

FIXED-INDEXED ANNUITIES

| | American Legend 7 | Safe Return | Premier Income Bonus |
|--------------------------|---|---|---|
| Issue ages | 0-85 (qualified) 0-85 (non-qualified) 0-75 (inherited IRA) 0-75 (inherited non-qualified) | 0-85 (qualified) 0-85 (non-qualified) 0-75 (inherited IRA) 0-75 (inherited non-qualified) | 40-85 (qualified and non-qualified) |
| Tax qualifications | <ul style="list-style-type: none"> • 403(b) (Traditional & Roth) • 457(b) • IRA (Traditional, Roth, SEP, SIMPLE, Inherited) • Non-qualified • Inherited non-qualified | | <ul style="list-style-type: none"> • 403(b) (Traditional & Roth) • 457(b) • IRA (Traditional, Roth, SEP, SIMPLE) • Non-qualified <i>Inherited contracts not available</i> |
| Purchase payments | Minimum: \$10,000 Additional purchase payments of at least \$2,000 accepted | Minimum: \$25,000 Additional purchase payments of at least \$2,000 (Q) or \$5,000 (NQ) accepted in first two months of contract | Minimum: \$10,000 Additional purchase payments of at least \$2,000 accepted in first 10 contract years |
| Early withdrawal charges | 7-year declining starting at 9% | 10-year declining starting at 10% | 7-year declining starting at 6% |
| Market value adjustment | Yes | No | Yes |
| Features | <ul style="list-style-type: none"> • Indexed strategies: Point-to-point with cap, participation rate or cap lock • GMSV: 87.5% of purchase payments plus interest credited at a guaranteed minimum rate • 10% penalty-free withdrawal beginning first contract year • Extended care and terminal illness waiver riders • Optional riders: IncomeSecure; Inheritance Enhancer | <ul style="list-style-type: none"> • Indexed strategies: Point-to-point with cap or participation rate • Bailout feature on indexed strategies • Return of premium guarantee • GMSV: 100% of purchase payments plus interest credited at a guaranteed minimum rate • 10% penalty-free withdrawal beginning first contract year • Extended care and terminal illness waiver riders • Optional rider: Inheritance Enhancer | <ul style="list-style-type: none"> • Indexed strategies: Point-to-point with cap, participation rate or cap lock • GMSV: 87.5% of purchase payments plus interest credited at a guaranteed minimum rate • 10% penalty-free withdrawal beginning first contract year • Extended care and terminal illness waiver riders • Includes built-in income rider with 6% rollup credit and 10-year rollup period (annual charge of 1.15%) |

FIXED-INDEXED ANNUITY RIDERS

| | IncomeSecure | Inheritance Enhancer |
|----------------------|--|--|
| Issue ages | 40-85 (qualified and non-qualified); Income payments may begin at age 55 | 50-85 (qualified and non-qualified) |
| Current rider charge | See IncomeSecure brochure for current rider charge, which is based off the income base and deducted from the account value. | See InheritanceEnhancer brochure for current rider charge, which is based off the death benefit base and deducted from the account value. |
| Features | <ul style="list-style-type: none"> • Guaranteed income rider • Income payments may be taken at any time, if client is age 55 or older • Resets available at first anniversary • Competitive payout percentages that increase annually for a set period of time until income start date • Available income options: single lifetime income and joint lifetime income | <ul style="list-style-type: none"> • Guaranteed death benefit rider • Refund of rider charge in certain circumstances • Resets available at first anniversary |

REGISTERED INDEX-LINKED ANNUITIES

| | Index Summit 6 | Index Summit 6 Pro |
|--------------------------|--|--|
| Issue ages | Up to age 80 | Up to age 80 |
| Tax qualifications | <ul style="list-style-type: none"> • 403(b) (Traditional & Roth) • 457(b) • 401(a) • IRA (Traditional, Roth, SEP, SIMPLE, Inherited) • Non-qualified • Inherited non-qualified | |
| Purchase payments | Minimum: \$25,000 Additional purchase payments of at least \$10,000 accepted in first two months of contract | Minimum: \$25,000 Additional purchase payments of at least \$10,000 accepted in first two months of contract |
| Early withdrawal charges | 6-year declining starting at 8% | 6-year declining starting at 9% |
| Fees | None | A fee is deducted from each strategy on a daily basis and compounds to an effective annual rate of 0.95% |

REGISTERED INDEX-LINKED ANNUITIES (CONTINUED)

| | Index Summit 6 | Index Summit 6 Pro |
|----------|--|--|
| Features | <ul style="list-style-type: none"> • Declared rate strategy • Indexed strategies: <ul style="list-style-type: none"> • 1-Year 50% Downside Participation Rate with Cap • 1-Year 50% Downside Participation Rate with Upside Participation Rate • 1-Year 10% Buffer with Cap • 1-Year 10% Buffer with Upside Participation Rate • 1-Year 10% Buffer with Performance Trigger • 1-Year 10% Buffer with Dual Performance Trigger • 1-Year 20% Buffer with Cap • 1-Year 20% Buffer with Performance Trigger • 1-Year -10% Floor with Cap • 1-Year 0% Floor with Cap • 2-Year 50% Downside Participation Rate with Cap • 2-Year 50% Downside Participation Rate with Upside Participation Rate • 3-Year 10% Buffer with Upside Participation Rate • 3-Year 20% Buffer with Upside Participation Rate • 6-Year 10% Buffer with Upside Participation Rate • 6-Year 20% Buffer with Upside Participation Rate <i>(6-year strategies only available for terms beginning in first contract year, 3-year strategies only available for terms beginning in first four contract years)</i> • 10% penalty-free withdrawal beginning first contract year • Death benefit is greater of account value or purchase payments, less proportional reductions for withdrawals • Extended care and terminal illness waiver riders • Performance lock available on select strategies. For more information and availability by strategy, please refer to the Product Overview. | <ul style="list-style-type: none"> • Indexed strategies: <ul style="list-style-type: none"> • 1-Year 50% Downside Participation Rate with Cap • 1-Year 50% Downside Participation Rate with Upside Participation Rate • 1-Year 10% Buffer with Cap • 1-Year 10% Buffer with Upside Participation Rate • 1-Year 10% Buffer with Performance Trigger • 1-Year 10% Buffer with Dual Performance Trigger • 1-Year 20% Buffer with Cap • 1-Year 20% Buffer with Performance Trigger • 1-Year -10% Floor with Cap • 1-Year 0% Floor with Cap • 2-Year 50% Downside Participation Rate with Cap • 2-Year 50% Downside Participation Rate with Upside Participation Rate • 3-Year 10% Buffer with Upside Participation Rate • 3-Year 20% Buffer with Upside Participation Rate • 6-Year 10% Buffer with Upside Participation Rate • 6-Year 20% Buffer with Upside Participation Rate <i>(6-year strategies only available for terms beginning in first contract year, 3-year strategies only available for terms beginning in first four contract years)</i> • 10% penalty-free withdrawal beginning first contract year • Death benefit is greater of account value or purchase payments, less proportional reductions for withdrawals • Extended care and terminal illness waiver riders • Performance lock available on select strategies. For more information and availability by strategy, please refer to the Product Overview. |

Registered index-linked annuities can only be sold through a Broker/Dealer that is contracted with MassMutual AscendSM. Any sales solicitation must be accompanied or preceded by a prospectus. To obtain a copy of the prospectus, please visit MassMutualAscend.com/RILArates. Principal Underwriter/Distributor: MM Ascend Life Investor Services, LLC, member FINRA and an affiliate of MassMutual Ascend Life Insurance CompanySM.

For additional product features, please see the Product Overview. The contracts remain the sole and exclusive authority for the terms and conditions of each product. In no event shall this guide be deemed to supplement, amend or otherwise alter any terms or conditions of any contract.

Extended care and terminal illness waiver riders not available in all states. Extended care waiver is offered under form numbers R6026109NW, R6026109OR, R6032410NW, R6032410OR or ICC20-R6032420NW. Terminal illness waiver offered under form numbers R6025809NW, R6032310NW or ICC20-R6032320NW. Products issued by MassMutual Ascend Life Insurance Company (Cincinnati, Ohio), a wholly owned subsidiary of Massachusetts Mutual Life Insurance Company (MassMutual) under contract form numbers ICC24-P1172524NW, P1134618W, P1112916NW, P1074514NW, P1470017NW, P1129918NW, ICC24-P1825224NW, ICC24-P1833624NW and rider form numbers R6036711NW, R6059018NW, R6042513NW, R6056918NW, ICC24-R1462424NW and ICC24-R1462324NW. Form numbers, features and availability may vary by state. Product may not be available in all states.

All guarantees subject to the claims-paying ability of MassMutual Ascend Life Insurance Company.

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