

American Freedom Liberty 7

OVERVIEW

ISSUE AGES

0-85 (qualified); 0-85 (non-qualified); 0-75 (inherited IRA); 0-75 (inherited non-qualified)

Issue age is the owner's age at last birthday. For joint owners, the oldest age will be used as the issue age. If the owner is a non-natural person, the age of the eldest annuitant will be treated as the age of the owner for all purposes under this contract.

PURCHASE PAYMENTS

This product accepts a single purchase payment for non-qualified, traditional 403(b), Roth 403(b), traditional IRA, Roth IRA, SEP IRA, SIMPLE IRA, Inherited IRA, Inherited non-qualified, and 457 plan funds. Additional purchase payments are allowed during the first 10 contract years. Terms begin only on the 6th and 20th of each month. Purchase payments received prior to the beginning of a term will be held in the purchase payment account until the beginning of the next term. Additional purchase payments have their own interest crediting terms.

Minimum: Initial purchase payment: \$25,000; additional purchase payments: \$2,000

Maximum: \$1 million

Maximums apply to the total purchase payments made to all annuities from MassMutual Ascend with the same owners or the same annuitants.

INTEREST STRATEGIES

Upon issue, the owner selects from two types of interest strategies: a **declared rate strategy** and **indexed strategies**. At the end of each term, the owner has the opportunity to transfer funds among the available interest strategies. To transfer funds, the owner must submit changes at least one day before the new term begins. Unless the owner transfers funds at the end of a term, funds are automatically applied to the same strategy for the next term. Available strategies are subject to change at any time for new sales.

TERM

- A term is the period over which interest is calculated for an indexed strategy. Indexed strategies available on this product offer either one-year or seven-year terms. Clients may reallocate funds among available strategies at the end of each one-year or seven-year term.
- The S&P 500 7-Year Cap Lock Annual Point-To-Point strategy has a seven-year term. The cap is locked in for the entire seven-year term. This strategy may only be selected during the first contract year. At the end of the seven-year term, funds held in the strategy are automatically applied to the S&P 500 1-year strategy, unless clients elect otherwise.

TERM (CONTINUED)

- The First Trust Barclays Edge Index 1-Year Point-To-Point with 7-Year Cap Lock strategy has seven one-year terms. The cap is locked in for all seven one-year terms. This strategy may only be selected during the first contract year. At the end of each one-year term, the ending value of this strategy may be applied to a new term of this strategy. No other amounts may be applied. At the end of each one-year term, clients may also reallocate funds held in this strategy among other available strategies. Funds held in the strategy at the end of the seventh one-year term are automatically applied to the First Trust Barclays Edge Index 1-year point-to-point with cap strategy unless clients elect otherwise.
- All other strategies have one-year terms.
- Interest, if any, is credited on the last day of each term year on all indexed strategies.

INTEREST RATES

Purchase payment account interest rate: Interest is credited daily on amounts held in this account based on an applicable interest rate. This interest rate is guaranteed to be at least equal to the GMSV rate set out in the contract.

Declared interest rate: Interest is credited daily on amounts held under a declared rate strategy based on the applicable declared interest rate. The current declared interest rate will not change during the strategy's term and is guaranteed to never be below the guaranteed minimum declared rate set out in the contract.

Indexed interest rate: Indexed strategies linked to the S&P 500®(SPX), iShares U.S. Real Estate ETF (IYR) and the iShares MSCI EAFE ETF (EFA) provide returns based, in part, on the change in the price of the applicable Index or ETF. The price does not include dividends that might be paid on the underlying investments of the Index or ETF.

Indexed strategies linked to the First Trust Barclays Edge Index (FTEDGE7) provide returns based, in part, on the change in the price of the Index. The price change includes dividends that might be paid on components of the Index.

Indexed strategies include:

- S&P 500® 1-year point-to-point with cap
- S&P 500® 7-year cap lock annual point-to-point
- iShares U.S. Real Estate 1-year point-to-point with cap
- iShares MSCI EAFE 1-year point-to-point with cap
- First Trust Barclays Edge Index 1-year point-to-point with cap
- First Trust Barclays Edge Index 1-year point-to-point with 7-year cap lock

Point-to-point indexed strategy: The indexed interest rate for a term year is determined by comparing the index value on the last day of that term year to the value on the first day of that term year. The indexed interest rate for that term year equals the index change, up to the cap. The indexed interest rate will never be less than 0%.

Available strategies may vary by state and by distribution.

BAILOUT FEATURE

American Freedom Liberty 7 features a bailout on the 1-year indexed strategies. This feature allows the client to withdraw money without penalty from an indexed strategy if the cap for the indexed strategy ever falls below its bailout rate. The bailout rate will always be below the initial cap. If the bailout feature is triggered, we will send a letter and give the client 30 days to withdraw money from that strategy with no early withdrawal charge.

ACCOUNT VALUE

The account value equals the sum of the following values:

Purchase payment account value: The purchase payment account value equals the purchase payments received, less amounts applied to an interest strategy, less withdrawals and applicable early withdrawal charges, plus interest credited, less any rider charges, and less any applicable premium tax or other applicable tax.

Declared rate strategy value: A declared rate strategy value equals the amount applied to the declared rate strategy, less withdrawals and applicable early withdrawal charges, plus interest credited at the declared interest rate, and less any rider charges.

Interest strategy value: An interest strategy value equals the amount applied to that strategy, less withdrawals and applicable early withdrawal charges, plus indexed interest credited, and less any rider charges.

SURRENDER VALUE

The surrender value equals the greater of the account value adjusted less any early withdrawal charges and rider charges or the guaranteed minimum surrender value.

GUARANTEED MINIMUM SURRENDER VALUE (GMSV)

The GMSV equals 100% of purchase payments, plus interest credited daily at the GMSV rate, less prior withdrawals (other than rider charges) and early withdrawal charges, minus the account value multiplied by the applicable early withdrawal charge rate. The GMSV will not be less than the minimum values required by the applicable state.

FEEES

There are no up-front sales charges or fees.

EARLY WITHDRAWAL CHARGES

An early withdrawal charge is applied to surrenders and withdrawals for the first seven contract years.

| CONTRACT YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8+ |
|--------------------------------|----|----|----|----|----|----|----|----|
| EARLY WITHDRAWAL CHARGE | 9% | 8% | 7% | 6% | 5% | 4% | 3% | 0% |

FREE WITHDRAWAL ALLOWANCE

During the first contract year, 10% of the purchase payments may be withdrawn without an early withdrawal charge. After the first contract year, 10% of the sum of the account value on the most recent contract anniversary plus subsequent purchase payments may be withdrawn without an early withdrawal charge. The sum of all previous withdrawals during the same contract year will be subtracted to determine the amount available. This free withdrawal allowance is not cumulative, and unused amounts do not carry over to the next contract year.

WITHDRAWALS

Withdrawals are allowed any time prior to the annuity payout initiation date. All withdrawals are subject to IRS regulations and early withdrawal charges. Withdrawals will be taken first from amounts applied to the purchase payment account, then from the interest strategy with the shortest term. If there are multiple interest strategies that meet that criterion, withdrawals will be taken proportionally from all interest strategies with the shortest term. Amounts withdrawn from an interest strategy prior to the end of a term year will not be credited with interest.

Minimum withdrawal: \$500;

Minimum account value following withdrawal: \$5,000.

EXTENDED CARE WAIVER RIDER

To help ease the strain of certain unforeseen events, an extended care waiver is available for no additional charge. If the owner is confined to a nursing home or other long-term care facility after the completion of the first contract year for at least 90 consecutive days, early withdrawal charges may be waived on withdrawals up to a full surrender.

Not available in Massachusetts. In California, the Extended Care Waiver Rider has been replaced with the Waiver of Early Withdrawal Charges for Facility Care or Home Care or Community-Based Services Rider, which provides for a waiver of early withdrawal charges under an expanded variety of circumstances.

TERMINAL ILLNESS WAIVER RIDER

Provided that the diagnosis is rendered more than one year after the contract effective date, up to 100% of the account value can be withdrawn without deduction of an early withdrawal charge if the owner or joint owner is diagnosed by a physician as having a terminal illness with a life expectancy of 12 months or less.

This waiver may be used only once. Not available in Massachusetts.

EASY SYSTEMATIC PAYMENT (ESP) PROGRAM (NON-CONTRACTUAL)

The fixed dollar and RMD options are available. Refer to the Terms and Conditions section of the applicable ESP program election agreement form for eligibility requirements. ESP payments reduce the amount available under the free withdrawal allowance. Indexed interest is credited only at the end of a term year. Amounts withdrawn under the ESP program before the end of a term year will not earn any indexed interest.

PAYOUT OPTIONS

The following options are available following the first contract year: fixed period payout, life payout or life payout with payments for at least a fixed period and joint and one-half survivor payout.

DEATH BENEFIT

The death benefit amount is based on the greater of the account value or the GMSV. A death benefit is payable if the owner dies before annuitization or surrender. A spouse who is the surviving joint owner or sole surviving beneficiary may become the successor owner.

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