

Premier Income Bonus

OVERVIEW

ISSUE AGES	<p>40-85 (qualified and non-qualified)</p> <p>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.</p>
PURCHASE PAYMENTS	<p>This product accepts purchase payments during the first two contract months for non-qualified, Traditional 403(b), Roth 403(b), Traditional IRA, Roth IRA, SEP IRA, SIMPLE IRA and 457 plan funds. 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.</p> <p>Minimum: Initial purchase payment: \$10,000; additional purchase payments: \$2,000</p> <p>Maximum (without prior approval): \$2 million for ages 0-75, \$1 million for ages 76+</p> <p>Maximums apply to the total purchase payments made to all annuities from MassMutual Ascend with the same owners or the same annuitants.</p>
FEES	<p>There are no up-front sales charges or fees.</p>
BUILT-IN INCOME RIDER	<p>This product includes a built-in income rider. The rider benefit base starts with purchase payments and is increased by rollup credits and a bonus equal to 6% of all purchase payments. At the end of each year during the 10-year rollup period, the current benefit base is increased by 6% (simple interest) of all purchase payments and rider bonuses. The rollup credit for a purchase payment received after the start of the first contract year will be prorated. Rollup credits cannot increase the benefit base to more than the rollup cap, which is equal to 250% of purchase payments plus rider bonuses. Beginning with the first rider anniversary and any anniversary thereafter, the benefit base may be reset to the account value, if greater. By resetting the benefit base, the rollup period and rollup credits can begin again. Resets are only available before income payments begin and may increase the annual rider charge. A reset must be requested and cannot be automatic.</p> <p>An annual charge of 1.15% of the benefit base will be taken at the end of each contract year. The charge is deducted from the account value. A prorated portion of the rider charge will be taken upon surrender of the contract or termination of the rider. The client may cancel the rider at any time by written request.</p>
EXTENDED CARE WAIVER RIDER	<p>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.</p> <p><i>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.</i></p>

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.

INTEREST STRATEGIES

Upon issue, the owner selects from two types of interest strategies: a **declared rate strategy** and **indexed strategies**. The owner has the opportunity to reallocate the account value among the available interest strategies. Changes for new purchase payments will apply upon the receipt of the request. For amounts already in the contract, changes will be applied at the end of the current term. To change strategy selections or amounts applied, the owner must submit a strategy selection form at least five days prior to the end of that 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 one-year terms. Clients may reallocate funds among available strategies at the end of each one-year term.
- 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.
- 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 guaranteed minimum interest 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), S&P 500 Risk Control 10% Index (SPXAV10P), S&P U.S. Retiree Spending Index (SPRETIRE), and the iShares U.S. Real Estate ETF (IYR) 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 Risk Control 1-year point-to-point with participation rate
- S&P U.S. Retiree Spending 1-year point-to-point with participation rate
- iShares U.S. Real Estate 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

INTEREST RATES CONTINUED

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

Available strategies may vary by state and by distribution.

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 or minus applicable MVAs, plus interest credited, less any applicable rider fees and 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 any amounts withdrawn, including any applicable early withdrawal charges on those amounts, plus or minus applicable MVAs, plus interest credited at the declared interest rate, and less any rider fees and charges.

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

SURRENDER VALUE

The surrender value equals the greater of the account value less any early withdrawal charges, plus or minus applicable MVAs, or the guaranteed minimum surrender value.

GUARANTEED MINIMUM SURRENDER VALUE (GMSV)

The GMSV equals 87.5% of purchase payments, plus interest credited daily at a minimum guaranteed rate, less withdrawals, not including amounts applied to pay early withdrawal charges or negative MVAs. The GMSV will not be less than the minimum values required by each state.

EARLY WITHDRAWAL CHARGE

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	6%	5%	4%	3%	3%	3%	3%	0%

MARKET VALUE ADJUSTMENT (MVA)

During the first seven contract years, a market value adjustment (or MVA) will apply if the contract is surrendered or a withdrawal above the free withdrawal allowance is taken. An MVA is an adjustment to the contract values based on how market interest rates have changed since the purchase payment was received. If interest rates have gone up, the adjustment will be negative and may decrease contract values. If interest rates have gone down, the adjustment may be positive and may increase contract values. The amount subject to the adjustment is the portion of the account value withdrawn after the 10% free withdrawal allowance. This amount is then multiplied by the MVA factor. A positive MVA will never be more than the early withdrawal charge that would apply to the withdrawal or surrender. A negative MVA, together with the early withdrawal charge, will never reduce the account value by more than an amount equal to two times that charge.

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 account value on the most recent contract anniversary 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 commencement 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 will not be credited with interest.

Minimum withdrawal: \$500;

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

The rider benefit base will accumulate rollup credits as long as withdrawals do not exceed the free withdrawal allowance or required minimum distribution. Withdrawals may be taken during any phase of the contract, but account value, rollup credits and the benefit base may be affected. The benefit base will be reduced for any withdrawals taken before income payments begin as well as those above the applicable income payment amount once payments have begun. This rider uses a proportionality concept. If a withdrawal is taken (other than to pay rider charges or to use as an income payment), the benefit base will be reduced by the same percentage that is withdrawn from the account value. If the owner takes a withdrawal that does not exceed the free withdrawal allowance, the rollup credit will be reduced dollar for dollar for that year. Rollup credits will continue to accumulate thereafter until the end of the rollup period. Rollup credits stop if the owner takes a withdrawal that exceeds the free withdrawal allowance.

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. Amounts withdrawn under the ESP program before the end of a term will not earn any indexed interest.

LOANS

A loan endorsement is available for 403(b) and 457(b) contracts. Loans are subject to terms of the loan application and agreement (TSAL2798).

Minimum loan amount: \$1,000;

Minimum surrender value balance that must remain following a loan: \$500 plus amounts held to secure all outstanding loans on the contract.

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.

RIDER INCOME PAYMENTS

If the client is 55 years old or older, rider income payments may be taken at any time through withdrawals based on the benefit base and the income option that was selected. There are two income options available: **single lifetime income** and **joint lifetime income**. If joint lifetime income is selected, the owner and spouse must be at least age 55 on the income start date. The maximum annual income payment is the income percentage multiplied by the benefit base. The income percentage is based on the client's age at the time of the first income payment under the rider and the income option that was selected. The income percentage increases 0.10% each year until it reaches 7.5% for single lifetime income and 6.5% for the joint lifetime income. The income percentage is locked in and will not change once payments begin.

MAXIMUM INCOME PERCENTAGE TABLE

Age at income start date*	Single lifetime income	Joint lifetime income
55	4.0%	3.0%
65	5.0%	4.0%
75	6.0%	5.0%
85	7.0%	6.0%
90+	7.5%	6.5%

EXAMPLE OF MAXIMUM INCOME PERCENTAGE FOR AGES 65-75

Age at income start date*	Single lifetime income	Joint lifetime income
65	5.0%	4.0%
66	5.1%	4.1%
67	5.2%	4.2%
68	5.3%	4.3%
69	5.4%	4.4%
70	5.5%	4.5%
71	5.6%	4.6%
72	5.7%	4.7%
73	5.8%	4.8%
74	5.9%	4.9%
75	6.0%	5.0%

*If joint lifetime, use the age of the younger spouse or legally recognized domestic partner.

DEATH BENEFIT

The greater of the account value or GMSV will be paid upon the death of the owner. A spouse who is the surviving joint owner or sole surviving beneficiary may become the successor owner.

PREMIUM TAX

If the owner elects to take an annuity payout benefit, premium tax will be deducted if the owner lives in a state that has a premium tax on annuitizations. If a death benefit is paid under a payout option, premium tax will be deducted if the beneficiary lives in a state that has a premium tax on annuitizations.

STATE VARIATIONS

Refer to State Approval Chart for non-MVA states.

New Jersey: The GMSV equals 90% of purchase payments, plus interest credited daily at a minimum guaranteed rate, less prior withdrawals, net of applicable early withdrawal charges and market value adjustments.

The S&P 500 Risk Control 10% Index refers to the S&P 500 Average Daily Risk Control 10% Price Return Index. For more information, visit US.SPIndices.com and search keyword SPXAV10P.

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