

**CHAPTER 110: PACE PROGRAM REGULATIONS: LOAN UNDERWRITING STANDARDS, CONSUMER DISCLOSURE REQUIREMENTS, TERMS AND CONDITIONS OF PARTICIPATION AND QUALITY ASSURANCE SYSTEM**

---

**SUMMARY:** The basis of this rule is to establish underwriting standards and consumer disclosure requirements for PACE (Property Assessed Clean Energy) loans and PACE agreements with owners of qualifying property who are participating in PACE programs funded by funds awarded to the State under the federal Energy Efficiency and Conservation Block Grant Program or by other funds available for this purpose, and to establish terms and conditions and a quality assurance system for PACE programs, whether administered by Efficiency Maine Trust (or its agent) or by a municipality.

---

**SECTION 1. SCOPE**

This Chapter applies to all PACE Loans and PACE Agreements entered into pursuant to a PACE Program, whether the PACE Program is administered by the Trust or its agent, or by a municipality. The types of property for which the PACE Program as administered by the Trust or its agent may be available shall be determined by the Board from time to time.

This rule governs the administration of a PACE Program for Residential Property using funds awarded to the State under the Federal Energy Efficiency and General Conservation Block Grant Program.

**SECTION 2. DEFINITIONS**

1. **Board.** “Board” shall mean the Efficiency Maine Trust Board established under 35-A M.R.S.A. § 10103 and 5 M.R.S.A. § 12004-G(10-c).
2. **Borrower.** “Borrower” means all of the owners (except any mortgage holder) of any Qualifying Property who have applied and been approved for a PACE Loan.
3. **BPI.** “BPI” means Building Performance Institute, Inc.
4. **Debt to Income Ratio.** “Debt to Income Ratio” means the ratio of the Borrower’s Monthly Gross Expenses to the Borrower’s Monthly Gross Income, expressed as a percentage.
5. **Director.** “Director” means the Executive Director of Efficiency Maine Trust, appointed pursuant to 35-A M.R.S.A. § 10103.
6. **Energy Audit.** “Energy Audit” means an analysis conducted by a Participating Energy Advisor, using such procedures and standards, including any software program for this purpose, approved by the Director, of energy loss in a Qualifying

Property to determine the savings to investment ratio and Estimated Useful Life of proposed Energy Savings Improvements.

7. **Energy Savings Improvement.** “Energy Savings Improvement” means an improvement to Qualifying Property that is new and permanently affixed to Qualifying Property and that:
  - A. Will result in increased energy efficiency and reduced energy use and:
    - (1) Meets or exceeds applicable United States Environmental Protection Agency and United States Department of Energy Star program or similar energy efficiency standards established or approved by the Trust; or
    - (2) Involves weatherization, including but not limited to, an energy audit, air sealing, insulating, and other energy efficiency improvements and test out, for residential property in a manner approved by the Trust; or
  - B. Involves a Renewable Energy Installation or an electric thermal storage system that meets or exceeds standards established or approved by the Trust.
8. **Estimated Useful Life.** “**Estimated Useful Life**” means longest useful life (not to exceed 20 years) of any Energy Savings Improvement as stated in the International Association of Certified Home Inspectors, Inc. (InterNACHI) “Estimated Life Expectancy Chart” **attached hereto as Appendix A.**
9. **Master Provider.** “Master Provider” means anyone who originates PACE Loans under a PACE Program or a Municipality or its agent that administers its PACE Program.
10. **Master Servicer.** “Master Servicer” means anyone who services PACE Loans under a PACE Program or a Municipality or its agent that administers its PACE Program.
11. **Monthly Gross Expenses.** “Monthly Gross Expenses” means the sum of the following monthly charges owed by the Borrower:
  - A. The monthly mortgage payment, taxes, property insurance, homeowners’ association or condominium fee payments and assessments whether or not they are included in a mortgage payment, for any property (not just the Qualifying Property). With respect to adjustable rate loans where there is a rate reset scheduled within 120 days after the date of application, the monthly mortgage payment used to determine eligibility will be the greater of (a) the Borrower’s current scheduled monthly mortgage payment or (b) a fully amortizing monthly mortgage payment based on the note reset rate using the index value as of the date of the application. With respect to adjustable rate loans that reset more than 120 days after the date of application, the Borrower’s current scheduled monthly mortgage payment will be used.

- B. Any mortgage insurance premiums.
- C. Monthly payments on all closed-end subordinate mortgages.
- D. Payments on all installment debts with more than 6 months of payments remaining, including debts that are in a period of deferment or forbearance.
- E. Monthly payments on revolving or open-end accounts, regardless of the balance. In the absence of a stated payment, the payment will be calculated by multiplying the outstanding balance by 3 percent.
- F. Monthly payments on a Home Equity Line of Credit (HELOC) using the minimum monthly payment reported on the Credit Report (as defined below). If the HELOC has a balance but no monthly payment is reported, then documentation shall be obtained verifying the payment amount, or the payment will be calculated by multiplying the outstanding balance by 1 percent.
- G. Alimony, child support and separation maintenance payments with more than 9 months remaining.
- H. Car lease payments, regardless of number remaining.
- I. Negative net rental income from all investment properties owned.
- J. Assessments under the proposed PACE Loan.

**12. Monthly Gross Income.** “Monthly Gross Income” means the Borrower’s income amount before any payroll deductions. It includes wages and salaries, overtime pay, commissions, fees, tips, bonuses, housing allowances, other compensation for personal services, Social Security payments, including Social Security and adoption subsidies received by adults on behalf of minors or by minors intended for their own support, and monthly income from annuities, insurance policies, retirement funds, pensions, disability or death benefits, unemployment benefits, rental income and other income.

**13. Municipality.** “Municipality” shall have the same meaning as “PACE Municipality”.

**14. PACE Agreement.** “PACE Agreement” means an agreement between the Borrower and the Program Administrator for the PACE Municipality in which the applicable Qualifying Property is located that evidences a PACE Loan and authorizes the creation of a PACE Mortgage on the Qualifying Property.

**15. PACE Assessment.** “PACE Assessment” means an assessment made by the Program Administrator against Qualifying Property to repay a PACE Loan,

- specifically, an amount calculated by the Master Provider to permit Borrower to repay the PACE Loan in periodic installments (the frequency of which shall be as provided in Section 4 (A) (1) (i) of this rule) of principal and accrued interest reflecting amortization of the principal amount of the PACE Loan over the PACE Loan's term at the PACE Loan's interest rate.
- 16. PACE Loan.** "PACE Loan" means a loan, secured by a PACE Mortgage, made pursuant to a PACE Program to fund Energy Savings Improvements for terms of five, ten or fifteen years, to be determined by the Borrower as provided in the Underwriting Standards in Section 2 below, bearing interest at rates the Board determines from time to time based on factors including the availability and cost of funding for PACE Loans, performance of PACE Loans and promoting availability of PACE Loans. Pace loan terms and interest rates are not in be structured to include negative amortization schedules, adjustable rates or balloon payments.
- 17. PACE Mortgage.** "PACE Mortgage" means a mortgage securing a PACE Loan.
- 18. PACE Municipality.** "PACE Municipality" or "Municipality" includes cities, towns and plantations, except that "municipality" does not include plantations in Title 10, chapter 110, subchapter IV; or Title 30-A, Part 2."
- 19. PACE Ordinance.** "PACE Ordinance" means an ordinance adopted by the legislative body of a Municipality for the purpose of participating in a PACE Program.
- 20. PACE Program.** "PACE Program" means a program established under 35-A M.R.S.A. §10151 *et. seq.* by a PACE Program Administrator under which property owners can finance Energy Savings Improvements on Qualifying Property.
- 21. PACE Program Administrator.** "PACE Program Administrator" means the Trust or a PACE Municipality that has elected to administer one or more of the functions of the PACE Program.
- 22. Participating Energy Advisor.** "Participating Energy Advisor" means a person or entity who provides Energy Audits and is qualified to do so as evidenced by having a current certification by BPI.
- 23. Qualifying Property.** "Qualifying Property" means real property as defined in Maine Law located in the PACE Municipality.
- 24. Registered Vendor.** "Registered Vendor" means a contractor or installer of Energy Saving Improvements who (i) has registered with the Trust, (ii) has provided the Trust with its name, contact information and location, (iii) has provided the Trust with a copy of a certificate of insurance showing that it has at least \$500,000 in commercial general liability coverage and workers' compensation liability insurance

as required by Maine law; and (iv) meets any certification or similar requirements of the Trust from time to time.

**25. Renewable Energy Installation.** “Renewable Energy Installation” means a fixture, product, system, device or interacting group of devices installed behind the meter at a Qualifying Property, or on contiguous property under common ownership, that produces energy or heat from renewable sources, including, but not limited to, photovoltaic systems, solar thermal systems, biomass systems, landfill gas to energy systems, geothermal systems, wind systems, wood pellet systems and any other systems eligible for funding under federal Qualified Energy Conservation Bonds or federal Clean Renewable Energy Bonds.

**26. Residential Property.** “Residential Property” is defined to mean Qualifying Property, consisting of a residential housing structure located in the State of Maine that contains no more than 4 units, each of which is suitable for occupancy by one or more persons and no more than 15 percent of the area is used in a trade, business or other commercial venture (except rental units in 2 to 4 unit residential properties) and includes a condominium unit, and “manufactured housing” as defined in 30-A M.R.S.A. § 4358(1)(A).

**27. Trust.** “Trust” means the Efficiency Maine Trust established in 35-A M.R.S.A. § 10103.

### SECTION 3. UNDERWRITING STANDARDS

**1. Requirements.** The following are underwriting requirements for any PACE Loan:

- A. A PACE Loan must be secured by a PACE Mortgage on Qualifying Property;
- B. The Qualifying Property securing a PACE Loan must be owned by the Borrower. Proof of ownership shall be obtained in the form of municipal tax records;
- C. The maximum amount of any PACE Loan shall be fifteen thousand dollars (\$15,000) and shall be based on total costs including Energy Audit and other costs under the contract for Energy Savings Improvements, less any rebate or other financial incentive provided by the Trust to the Borrower;
- D. The Borrower must demonstrate a Debt to Income Ratio of the maximum Total Fixed Payment to Effective Income ratio established by Section 4155.1.4.F.2.c. of the U.S Housing and Urban Development’s Handbook 4155.1 “Mortgage Credit Analysis for Mortgage Insurance” as amended, restated or replaced from time-to-time (the “HUD Handbook”) up to a maximum of 50%.

- (1) All Monthly Gross Expenses and related debt shall be verified using a credit report (including a joint report in the case of joint applicants as the Borrower) from a nationally recognized credit reporting agency (the "Credit Report"). In addition, information concerning Monthly Gross Expenses obtained in writing from the Borrower must be considered.
- (2) Based on the type and source of the Borrower's income, the following documents, none of which may be more than sixty (60) days old as of the date received, except for tax returns and quarterly profit and loss statements, shall be provided to verify Monthly Gross Income:
  - (a) **Tax Return:** A signed copy of the most recent federal income tax return, including all schedules and forms, if available.
  - (b) **Employment Income:** Copies of the two most recent pay stubs indicating year-to-date earnings.
  - (c) **Self-Employment Income:** The most recent quarterly or year-to-date profit and loss statement or a recent series of bank statements to demonstrate income for each self-employed Borrower, where such a profit and loss statement is not available.
  - (d) **Other Income:** (e.g., bonus, commission, fee, housing allowance, tips, overtime). A letter from the employer or other reliable third party documentation describing the nature of the income and indicating that the income will in all probability continue.
  - (e) **Benefit Income:** (e.g., Social Security, disability, death benefits, pension, public assistance, unemployment, adoption assistance). Evidence of the amount, frequency and duration of the benefits usually obtained through a monetary or award determination letter, disability policy or benefits statement from the provider. Also, evidence of receipt of payment, such as copies of the Borrower's two most recent bank statements showing the deposit amounts. The Trust must determine that the income will continue for at least six (6) months in order to include it as part of Borrower's income.
  - (f) **Rental Income:** Rental income should be documented through the Schedule E – Supplemental Income & Loss of the federal income tax return. If the Borrower is using

income from the rental of a portion of the Borrower's principal residence, the income should be calculated at 75% of the gross monthly rental income, with the remaining 25% considered vacancy loss and maintenance expenses. If the Borrower is using rental income from properties other than the Borrower's principal residence the income should be 75% of the monthly gross rental income reduced by the monthly debt service on the property (i.e., principal, interest, taxes, insurance, mortgage insurance and association fees), if applicable.

- (g) **Alimony, Separation Maintenance & Child Support:**  
The Borrower is not required to use alimony, separation maintenance or child support income to qualify for a PACE Loan. If the Borrower chooses to use this income, it should be documented with copies of the divorce decree, separation agreement or other legal agreement filed with a court, or a court decree that provides for the payment of alimony, separation maintenance or child support and states the amount of the award and the period of time over which it will be received. Evidence of receipt of payment can be documented with copies of the Borrower's two most recent bank statements showing the deposits.

- E. The term of the PACE Loan shall not exceed the average Estimated Useful Life of the financed Energy Savings Improvements;
- F. All Energy Savings Improvements financed through the PACE Loan shall meet the Cost-Effectiveness test to the Borrower as prescribed for PACE loans by the Trust from time-to-time;
- G. All Qualifying Property securing a PACE Loan must be:
- (1) Owned by the Borrower;
  - (2) Current with respect to property taxes and sewer charges;
  - (3) Free of outstanding and unsatisfied tax or sewer liens;
  - (4) Not be subject to a Reverse Mortgage Transaction (as defined in 9-A M.R.S.A. §8-103-1A(Y)); and
  - (5) Not be subject to a mortgage or other lien for which there is a default, foreclosure or delinquency that has not been cured, nor any unsatisfied judgment, mechanics, materialmen or architect lien;

- H. The value of the Qualifying Property shall be no less than 100% of the total amount of all mortgages and liens thereon, and the proposed PACE Loan. Such value will be supported by an appraisal not more than 24 months old or by the tax-assessed valuation of the Municipality adjusted by the Municipality's assessment ratio for the current year.
- I. The Borrower must certify that there are no overdue payments on mortgages or other liens secured by such property and provide either a certificate from each existing mortgage holder or a recent account statement to demonstrate current balances;
- J. In cases where PACE Assessments will be billed annually or biannually, monthly escrows will be required to be paid by Borrower to the Master Servicer.
- K. Such additional requirements including a minimum credit score, and consideration of bankruptcy, foreclosure and charge off history of the Borrower may be adopted by the Trust from time-to-time in accordance with prudent lending standards.

#### **SECTION 4. CONSUMER DISCLOSURE REQUIREMENTS**

- 1. Truth in Lending.** A PACE Agreement must provide consumer disclosure consistent with the principles of Truth in Lending. A disclosure in substantially the form of the "PACE Loan Disclosure Statement," prepared by the Bureau of Consumer Credit Protection and attached to this regulation as Appendix B, complies with this subsection. PACE Loans shall not be subject to the Maine Consumer Credit Code, Article 8, but shall be subject to 9-A MRSA §§9-301 (advertising); 9-304 (servicing requirements of assigned consumer credit transactions); 9-305 (interest to be held on funds held in escrow); 9-305-A (timely payments from escrow); 9-305-B (timely responses to requests for payoff figures); 9-306 (notice of assignment); 9-307 (receipts; statement of account; evidence of payment); 9-308 (right to prepay); 9-310 (privacy of consumer financial information); 9-311-A (real estate settlement procedures); and 9-314 (prepayment penalty riders).
- 2. Right of Rescission.** Notwithstanding any exemption from Article 8 of the Maine Consumer Credit Code, PACE Mortgages shall be subject to the right of rescission as stated in 9-A MRSA § 8-204.
- 3. Consumer privacy.** The provisions of the federal Gramm-Leach-Bliley Act, 15 United States Code, Section 6801 et seq. (1999), and the applicable implementing federal regulations regarding the privacy of consumer information, apply to all consumer financial information obtained by the Trust or Municipalities or their designees in implementing PACE Programs under this chapter.



**SECTION 5. TERMS AND CONDITIONS OF PARTICIPATION**

The following terms and conditions govern the participation of Municipalities and Borrowers in a PACE Program funded by funds awarded to the State under the federal Energy Efficiency and Conservation Block Grant Program or by any other funds from the Trust for this purpose.

**1. PACE Program Design, Implementation and Administration.****A. PACE Program Design.**

- (1) Schedule Energy Audit. The proposed Borrower schedules an Energy Audit with a Participating Energy Advisor.
- (2) Energy Audit. A Participating Energy Advisor conducts an Energy Audit, performing initial testing and generating reports regarding proposed Energy Savings Improvements, their cost, Estimated Useful Life and potential savings, and provides such reports, PACE Program information and PACE Loan application form to the proposed Borrower.
- (3) Application. The proposed Borrower contacts the Master Provider in the manner designated by the Master Provider from time to time (which may include but is not limited to contact by telephone or online) to begin the application process, supplying sufficient information to enable the Master Provider to obtain the proposed Borrower's Credit Report and lien and debt information and to calculate the contemplated approximate PACE Loan terms. The Master Provider then will send a written notice to the Borrower:
  - (a) explaining what the proposed Borrower must provide in order to complete the application form, including a quote from a Registered Vendor to construct/install specified Energy Savings Improvements; and
  - (b) confirming the specific Energy Savings Improvements the proposed Borrower wishes to have constructed/installed and financed and the maximum PACE Loan amount, term, interest rate and rebate from the Trust potentially available with respect to such Energy Savings Improvements; and
  - (c) providing a Good Faith Estimate (GFE) of the costs related to the proposed PACE Loan in accordance with the Real Estate Settlement Procedures Act (RESPA); and

- (d) asking the proposed Borrower to advise the Master Provider of the proposed Borrower's preference as to the term of the PACE Loan (five, ten or fifteen years, but not to exceed the average Estimated Useful Life of the Energy Savings Improvement(s)) and the name and location of the branch office of a participating bank or credit union to be used for closing or to make arrangements for an in-home closing. ("Closing Agent").
- (4) Application Review and Action. Upon receiving a completed PACE Loan application and the other requested materials from the Borrower, the Master Provider reviews the application and materials to determine within thirty (30) days whether the proposed Borrower meets the Underwriting Standards in Section 3 of this Rule.
  - (a) If the proposed PACE Loan is approved, the Master Provider prepares the PACE Agreement, which describes the Energy Savings Improvements and the terms of the PACE Loan, and the PACE Mortgage, using forms prepared by the Trust (collectively, the "PACE Loan Documents"). The Master Provider sends the PACE Loan Documents to the Closing Agent, and notifies the proposed Borrower and the Closing Agent as to how they should coordinate to select the date, time and location of closing which must occur within fourteen (14) days.
  - (b) If the proposed PACE Loan is not approved, the Master Provider shall send written notice of that fact, along with the reason(s) for the denial, to the proposed Borrower.
- (5) Loan Origination- Initial Disbursement. At the Closing, the Borrower shall execute the PACE Loan Documents. After expiration of the rescission period described in 9A M.R.S.A. § 8-204 the Trust or its agent issues a check or electronic payment to the Borrower in an amount equal to 30% of the PACE Loan Amount not to exceed \$5,000.
- (6) Establishment of PACE Mortgage. Within two (2) business days after the closing, the Closing Agent mails the signed PACE Agreement and PACE Mortgage to the Master Servicer, which promptly records the PACE Mortgage in the appropriate county registry of deeds.
- (7) Construction/Installation of Energy Savings Improvements. The Registered Vendor constructs and/or installs the Energy Savings Improvements consistent with the Energy Audit.

- (8) Loan Origination – Mid-project Disbursements. Upon receipt of notice from the Borrower that construction and/or installation of a major component of the Energy Savings Improvements is complete, the Trust or its agent may issue partial or total payment therefor, electronic or otherwise, up to the invoiced amount therefor, to the Borrower or, if directed by the Borrower, to the contractor providing such component.
- (9) Loan Origination – Final Disbursement. Upon receipt of (i) notice from the Registered Vendor that construction and/or installation of the Energy Saving Improvement is complete; and (ii) notice from the Participating Energy Advisor that it has conducted a test-out procedure verifying that the construction and/or installation of the Energy Savings Improvements meets BPI guidelines and recommendations, the Trust or its agent shall issue payments, electronic or otherwise, to the the Borrower (or, if directed by the Borrower, to the contractor providing the Energy Saving Improvement) for the remaining amount of the PACE Loan.
- (10) Loan Servicing. Unless the Trust has established an alternative arrangement with a Municipality administering the PACE Program under which the PACE Loan is established, the Master Servicer shall bill monthly PACE Assessments to the Borrower to be paid to the Master Servicer within thirty (30) days of each PACE Assessment invoice. Where the Borrower has failed to timely pay its monthly PACE Assessment, the Master Servicer shall send a notice of mortgagor’s right to cure in accordance with the provisions of 14 MRSA § 6111 (1), 14 MRSA § 6111 (1-A), and 14 MRSA § 6111 (3). If a PACE Assessment remains unpaid for six (6) months after it becomes delinquent, the Master Servicer may institute collection proceedings through collection agencies and/or through institution of legal proceedings exclusive of foreclosure. Upon payment in full of the PACE Loan and all interest, costs, fees and other charges in connection with the PACE Loan, the Master Servicer, or the Municipality if it is administering its PACE Program, shall record a discharge of the PACE Mortgage at the appropriate registry of deeds.

B. PACE Program Implementation.

- (1) The Loan Origination and Loan Servicing functions contemplated by or required for the PACE Loan Program may be provided by a Master Servicer selected by the Trust or a PACE Municipality, as appropriate, through a competitive proposal process. In the alternative, a PACE Municipality may elect to administer those functions through its employees or a third party agent.

- (2) The Trust shall maintain and make publicly available a list of Participating Energy Advisors who may conduct Energy Audits of Qualifying Property at the request of a proposed Borrower.
- (3) The Trust shall maintain a list of Registered Vendors who may construct and/or install Energy Savings Improvements under a PACE Program.

C. PACE Program Administration.

- (1) Cost-Sharing. The Trust shall be responsible for the costs of administration of the PACE Program, which costs may be included in and paid from the PACE Assessments collected on each PACE Loan in accordance with a fee schedule agreed to by the Trust, the Master Provider, the Master Servicer, and the Closing Agent.
- (2) Fee Schedule. A Municipality that adopts a PACE Ordinance under which the Municipality elects to administer loan origination and servicing functions through its employees or a third party agent shall be entitled to recover these costs from PACE Assessments on the same fee schedule as the Trust. Costs to such Municipalities, however, that exceed the fee schedule established by the Trust shall be the responsibility of the Municipality.

## SECTION 6. QUALITY ASSURANCE SYSTEM

1. The Trust will institute and maintain requirements for Participating Energy Advisors' and Registered Vendors.
2. The Trust will maintain a program to inspect construction and/or installation of Energy Savings Improvements under a PACE Program by a Participating Energy Advisor to determine that the improvements were properly constructed and/or installed and are operating properly. The percentage of completed projects financed through PACE Loans shall meet or exceed the "best practices" percentage established by the U.S. Environmental Protection Agency's Home Performance Program.
3. If the construction and/or installation of Energy Savings Improvements under a PACE Program also is subject to any other Trust rebate or other financing program, it will be inspected and tested under the terms of that program as well.
4. All quality assurance inspections and testing shall be for the Trust's benefit only. No Borrower, Municipality, nor any other person, may rely on such inspection or testing and such inspection or testing shall not constitute a warranty of any kind by the Trust or by any Municipality.

STATUTORY AUTHORITY: 5 M.R.S.A. § 12004-G(10-c); 35-A M.R.S.A. § 10105(5); 35-A M.R.S.A. § 10151, *et seq.*

**EFFECTIVE DATE:**

This Rule, under the title "PACE PROGRAM REGULATIONS: LOAN UNDERWRITING STANDARDS, CONSUMER DISCLOSURE REQUIREMENTS, TERMS AND CONDITIONS OF PARTICIPATION AND QUALITY ASSURANCE SYSTEM" was approved by the Secretary of State on December 7, 2010 and became effective on December 7, 2010.

**REPEALED AND REPLACED:**

This rule, under the title ""PACE PROGRAM REGULATIONS: LOAN UNDERWRITING STANDARDS, CONSUMER DISCLOSURE REQUIREMENTS, TERMS AND CONDITIONS OF PARTICIPATION AND QUALITY ASSURANCE SYSTEM" was approved as to form and legality by the Attorney General on [                      ]. It was filed with the Secretary of State on [                      ] and became effective on [                      ].

**APPENDIX A**

**InterNACHI's Estimated Life Expectancy Chart**

The following chart details the predicted life expectancy of household materials and components.

Interior and exterior paints can last for 15 years or longer, however homeowners often paint more frequently. Surface preparation is likely the most important determiner of paint life expectancy.

ADHESIVES, CAULK AND PAINTS	YEAR
Caulking	5-10
Paint	7
Roofing Adhesives	15+

Appliance life expectancy depends to a great extent on the use it receives. Furthermore, consumers often replace appliances long before they become worn out due to changes in styling, technology and consumer preferences. Of a home's major appliances, gas ranges have the longest life expectancy.

APPLIANCES	YEARS
Air-Conditioners	8-15
Boilers	20-35
Compactors	6
Dehumidifiers	8
Dishwashers	9
Disposers, Food waste	12
Dryers	13
Exhaust Fans	10
Freezers	10-20
Furnaces	15-25
Gas Ovens	10-18
Heat Pumps	16
Humidifiers	8
Microwave Ovens	9
Range/Oven Hoods	14
Electric Ranges	13-15
Gas Ranges	15-17
Refrigerators	9-13
Washing Machine	5 -15
Water Heaters	10-11

BATHROOM	YEARS
Cast Iron Bathtub	50
Fiberglass Bathtub and Shower	10-15

Shower Door	25
Toilet	50

Kitchens are in the process of becoming larger and more elaborate, and together with the family room, modern kitchens now form the “great room.”

Great rooms are a place to cook as well as a space where people gather to read, talk, eat, do homework, surf the Internet, and pay bills.

CABINETS & STORAGE	YEARS
Bath Cabinets	100+
Closet Shelves	100+
Entertainment Centers/Home Office	10
Garage/Laundry Cabinets	100+
Kitchen Cabinets	50
Medicine Cabinets	20+
Modular/Stock Manufacturing Type	50

Walls and ceilings last the full lifespan of the home.

CEILINGS, WALLS & FINISHES	YEARS
Acoustical Ceiling	100+
Ceiling Suspension	100+
Ceramic Tile	100+
Standard Gypsum	100+

Natural stone countertops, which are less expensive than they were just a few years ago, are becoming more popular and one can expect them to last a lifetime. Cultured marble countertops have a shorter life expectancy, however.

COUNTERTOPS	YEARS
Cultured Marble	20
Natural Stone	100+
Laminate Countertops	20 - 30
Tile	100+
Wood	100+

Decks are exposed to a wide range of conditions in different climates, from wind and hail in some areas to relatively consistent, dry weather, in others. Under ideal conditions, they have a life expectancy of about 20 years but they can fail much sooner.

DECKS	YEARS
Deck Planks	25
Wood	10-30

Exterior fiberglass, steel and wood doors will last as long as the house, while vinyl and screen doors have a shorter life expectancy. Closet doors may last a lifetime, but French doors will fail sooner.

DOORS	YEARS
Closet (Interior)	100+
Fiberglass (Exterior)	100+
Fire-Rated Steel (Exterior)	100+

French (Interior)	30-50
Screen (Exterior)	40
Vinyl (Exterior)	20
Wood (Exterior)	100+
Wood (Hollow Core Interior)	20 - 30
Wood (Solid Core Interior)	30 - 100+

Floor and roof trusses and laminated strand lumber are durable household components, and engineered trim may last 30 years.

ENGINEERED LUMBER	YEARS
Engineered Trim	30
Laminated Strand Lumber	100+
Laminated Veneer Lumber	80+
Trusses	100+

FIXTURES & FAUCETS	YEARS
Accessible/ADA Products	100+
Enamel Steel Kitchen Sinks	5-10
Faucets	15-20
Modified Acrylic Kitchen Sinks	50
Saunas/Steam Rooms	15-20
Shower Enclosures/Modules	50
Shower heads	100+
Soapstone Kitchen Sinks	100+
Toilets/Bidets	100+
Whirlpool Tubs	20-50

Natural wood floorings may last as long as the house. Marble, slate, and granite are also expected to last for about 100 years, but require more maintenance. Vinyl floors last up to 50 years, linoleum about 25 years, and carpet between 8 and 10 years (with appropriate maintenance and normal traffic).

FLOORING	YEARS
All Wooden Floors	100+
Bamboo	100+
Brick Pavers	100+
Carpet	8-10
Concrete	50+
Engineered Wood	50+
Exotic Wood	100+
Granite	100+
Laminate	15-25
Linoleum	25
Marble	100+
Other Domestic Wood	100+
Slate	100



Terrazo	75+
Tile	75-100
Vinyl	25

Concrete and poured block footings and foundations will last a lifetime, assuming they were properly built. Termite proofing of foundations will last about 12 years if the chemical barriers put in place during construction are left intact. Waterproofing with bituminous coating lasts 10 years, but if it cracks it is immediately damaged.

FOOTING & FOUNDATIONS	YEARS
Baseboard System	50
Bituminous Coating Waterproofing	10
Cast Iron Waste Pipe (Above Ground)	60+
Cast Iron Waste Pipe (Below ground)	50 - 60
Concrete Block	100+
Concrete Waste Pipe	100
Poured Footings and Foundations	100+
Pumps, Sumps, and Wells	5-12
Termite Proofing	12

Framing and structural systems have extended longevity; poured-concrete systems, timber frame houses and structural insulated panels will all last a lifetime. Wall panels and roof and floor trusses will also last a lifetime. Hardboard, softwood, and plywood last an average of 30 years, while OSB and particleboard are expected to last twice that long.

FRAMING & OTHER STRUCTURAL SYSTEMS	YEARS
Poured-Concrete Systems	100+
Structural Insulated Panels	100+
Timber Frame Homes	100+

Garage door openers are expected to last 10 to 15 years, and light inserts will last slightly longer.

GARAGES	YEARS
Garage Doors	20-25
Garage Door Openers	10-15
Light Inserts	20

Home technology systems have diverse life expectancies. While a built-in audio system will last 20 years, security systems and heat/smoke detectors have life expectancies of 5 to 10 years. Wireless home networks and home automation systems are expected to work properly for more than 50 years.

HOME TECHNOLOGY	YEARS
Built-in Audio	20
Home Automation Systems	100+
Security Systems	5-10
Smoke/Heat Detectors	Less Than 10
Wireless Home Networks	50+

Heating, ventilation, and air conditioning systems require regular maintenance in order to work properly, but even well-maintained systems only last 15 to 25 years. Furnaces, on average, last 15-20 years, heat pumps last 16 years, and air conditioning units last 10-15 years. Tankless water

heaters last more than 20 years, while an electric or gas water heater has a life expectancy of about 10 years. Thermostats may last 35 years but they are usually replaced before they fail due to technological improvements.

HVAC	YEARS
Air Conditioners	10-15
Air Quality Systems	15
Attic Fans	15 - 25
Boilers	13-21
Burners	10+
Central Air Conditioning Unite	12-15
Dampers	20+
Dehumidifiers	8
Diffusers, Grilles, and Registers	25
Ducting	10
DX, Water, Or Steam	20
Electric	15
Electric Radiant Heater	40
Furnaces	15-20
Heat Exchangers, shell + tube	10-15
Heat Pumps	16
Heat Recovery Ventilators	20
Hot Water or Steam Radiant Heater	40
Induction and Fan-Coil Units	10-15
Molded Insulation	100+
Shell and Tube	20
Thermostats	35
Ventilators	7
Water Heaters	20+

As long as they are not punctured, cut, or burned and are kept dry and away from UV rays, cellulose, fiberglass, and foam insulation materials will last a lifetime. This is true regardless of whether they were installed as loose fill, house wrap, or batts/rolls.

INSULATION & INFILTRATION BARRIERS	YEARS
Batts/Rolls	100+
Cellulose	100+
Fiberglass	100+
Foam	100+
House Wrap	100+
Loose Fill	100+

Copper plated wiring, copper clad aluminum, and bare copper wiring are expected to last a lifetime, whereas electrical accessories and lighting controls may need to be replaced after 10 years.

LIGHTING & ELECTRICAL	YEARS
Accessories	10+
Bare Copper	100+
Copper Clad Aluminum	100+

Copper Plated	100+
Lighting Controls	10+

Masonry is one of the most enduring household components. Fireplaces, chimneys, and brick veneers can last the lifetime of a home.

MASONRY & CONCRETE	YEARS
Brick	100+
Sealer Caulking	2-20
Stone	100+
Veneer	100+

Custom millwork will last a lifetime, and all stairs – circular and spiral stairs, prebuilt stairs and attic stairs – are expected to last a lifetime.

MOLDING & MILLWORK	YEARS
Attic Stairs	100+
Custom Millwork	100+
Prebuilt Stairs	100+
Stair Parts	100+
Stairs, Circular & Spiral	100+

Lifetime of any wood product depend on level of moisture intrusion

PANELS	YEARS
Flooring Underlayment	25
Hardboard	30
Particleboard	60
Plywood	60
Softwood	30
Oriented-Strand Board	60
Wall Panels	100+

The life of a roof depends on local weather conditions, building and design, material quality, and adequate maintenance. Slate, copper, and clay/concrete roofs have the longest life expectancy while roofs made of asphalt shingles, fiber cement or wood shakes will fail sooner.

ROOFING	YEARS
Aluminum Coating	3-7
Asphalt Shingles (3 - tab)	20
Asphalt (Architectural)	30
BUR (Built-up Roof)	30
Clay/Concrete	100+
Coal and Tar	30
Copper	100+
EPDM (Ethylene Propylene Diene Monomer) Rubber	15 - 25
Fiber Cement	25
Metal	40 - 50
Modified Bitumen	20
Simulated Slate	50

Slate	50+
TPO	7 - 20
Wood	30

Outside materials typically last a lifetime. Brick, vinyl, engineered wood, stone (both natural and manufactured), and fiber cement will last as long the house. Exterior wood shutters are expected to last 20 years, depending on weather conditions. Gutters have a life expectancy of more than 50 years if made of copper and for 20 years if made of aluminum. Copper downspouts last 100 years or more, while aluminum ones will last 30 years.

SIDING & ACCESSORIES	YEARS
Aluminum Downspouts	30
Aluminum Gutters	20
Aluminum/Interior Shutters	10+
Brick	100+
Copper Downspouts	100
Copper Gutters	50+
Engineered Wood	100+
Fiber Cement	100+
Galvanized Steel Gutters/Downspouts	20
Manufactured Stone	100+
Soffits/Fascias	50
Stone	100+
Stucco	50 - 100
Trim	25
Vinyl	100+
Wood/Exterior Shutters	20
Wood/Interior Shutters	15+

Most landscaping elements have a life expectancy of 15 to 25 years. Sprinklers and valves last about 20 years, while underground PVC piping has a lifespan of 25 years. Polyvinyl fences are designed to last as long as the house, and asphalt driveways should last between 15 and 20 years. Tennis courts can last a lifetime if they are recoated; most coatings last 12 to 15 years. The concrete shell of a swimming pool is expected to last more than 25 years, but the interior plaster and tile have life expectancies of about 10 to 25 years.

SITE & LANDSCAPING	YEARS
American Red Clay	100+
Asphalt Driveway	15-20
Asphalt with Acrylic Coating or Cushion	12-15
Brick & Concrete Patios	15-25
Clay Paving	100+
Cleaning Equipment(Swimming Pool)	7-10
Coating	5-7
Concrete Shell (Swimming Pool)	25+
Concrete Walks	40- 50
Controllers	15
Decking(Swimming Pool)	15
Fast-Dry Green Tennis Court	100+
Fast-Dry with Subsurface	100+

Gravel Walks	4-6
Interior Finish( Swimming Pool)	10-35
Polyvinyl Fences	100+
Sprinklers	10-14
Underground PVC Piping	60+
Valves	20
Waterline Tile ( Swimming Pool)	10

Aluminum windows are expected to last between 15 and 20 years while wooden windows should last nearly 30 years.

SKYLIGHTS & WINDOWS	YEARS
Aluminum/Aluminum Clad	15-20
Window Glazing	10+
Vinyl Windows	20 - 40
Wood	30+

**Note:** Life expectancy varies with usage, weather, installation, maintenance and quality of materials. Items listed as lasting 100+ years, especially those that open and close, often fail prematurely due to misuse or overuse. This list should be used only as a general guideline, not as a guarantee or warranty regarding the performance or life expectancy of any product.

