

Nuts & Bolts

Volume 29, Number 3
May-June 2011

a newsletter from Home Repair Resource Center

The flooring is nailed to boards called “**joists**.” To have a firm floor, those joists must be solid, so check whether they have been damaged by moisture or dry rot. As a rule of thumb, if you can push a nail into a joist by hand to a depth of 1/2”, then it is likely too far deteriorated to work as it should.

Porch flooring repair

It’s not always necessary to replace an entire porch floor; you can often get away with replacing a few rotting boards here and there. Even if you have to replace a larger section, it doesn’t have to be expensive. Most lumber yards carry 8-foot lengths of 4”-wide porch flooring – though if you have a less common size, the boards may be harder to find and more expensive. The really important thing is to get to the repairs early, before moisture starts to damage the frame underneath. Once water gets under the floor, the flooring will start to buckle – and the cost and time required to fix the problem will increase.



Porch flooring is usually not too hard to remove and replace, if you understand how the pieces go together. The working edges of flooring are called “**tongue**” and “**groove**.” These ends are made to work together to hold the flooring down, with the tongue of each flooring piece fitting into the groove of the neighboring piece.

Use a hammer and wood chisel to remove the first rotten board, being careful not to damage the tongue or groove of the sound board next to it.

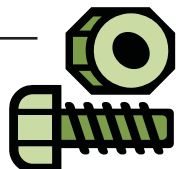
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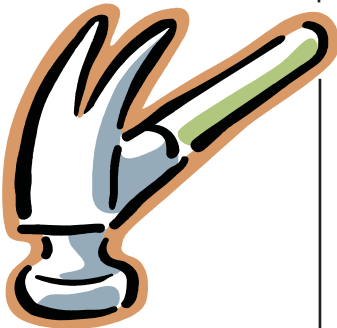
Changes in our Tool Loan program

Project Repair will no longer offer certain tools through our Tool Loan. Make sure you are prepared for the upcoming season.



We need your help

Each year, HRRC gathers information on how our programs are used to produce real repairs and improvements to the homes of Cleveland Heights. We ask tool borrowers what projects they completed with equipment from our Tool Loan, and we send out a “Repairs Completed Card” at the end of each year to all Project Repair participants. Unfortunately, many people who come to workshops or call for information do not let us know about the work they are then able to do with our help. PLEASE, when you complete a project, call and tell us about it – you can even brag about all the hard work you did! With your help, we can document the impact of Project Repair on the larger community.



Holiday Closings:

Home Repair Resource Center will be closed on Monday, May 30th for Memorial Day.

Plan ahead to get any tools or information you'll need.

New discount card

Your current PR discount card will expire on June 1st. IF you want a new card, call us at 381-9560, and we'll arrange for you to get one. Or, pick one up at our office any weekday between 9 a.m. and noon.

The following merchants will honor PR's card for discounts on tools and materials:

- Cedar Center Hardware
- Dunn Hardware & Home Repair
- Heights Hardware
- Seitz-Agin Hardware
- Sherwin Williams Company
- South Euclid Hardware
- The Tile Shop

Check them out for your next project!

Summer hours for tool loan and library

Starting May 28th (Memorial Day weekend), you may arrange to use our Tool Loan and Resource Library between 9 and 10 a.m. on Saturday mornings, in addition to our early evening hours on Mondays and Wednesdays. **You must call ahead to use these extended hours.** Russell Toppin, who staffs these times, can loan out a tool *only if prior arrangements have been made with Becky or Jim*. Call Project Repair at 381-9560 any weekday morning.

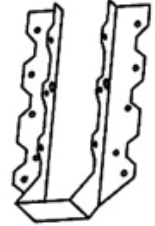
Please arrive early enough to complete your transaction and load the tool within the time specified. Bring someone with you to help load any heavy tools. To transport a ladder atop your car, bring a blanket or rug to protect the roof.

Porch flooring repair

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Once you have the first board out, use a cat's paw or pry bar to take out any other damaged pieces. Before putting down the replacement flooring, look carefully at the wood frame underneath. The flooring is nailed to boards called "**joists.**" To have a firm floor, those joists must be solid, so check whether they have been damaged by moisture or dry rot. As a rule of thumb, if you can push a nail into a joist by hand to a depth of 1/2", then it is likely too far deteriorated to work as it should. You can usually repair or replace the joist yourself.

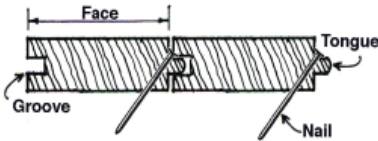
To strengthen a deteriorating joist, cut a piece of new wood to length, nail that piece along one side of the weakened joist, and then toe-nail it into the frame at each end. (This process is called "**sistering.**") If the original joist is totally rotten and must be replaced, attach the new joist to the supporting framework using a galvanized **joist hanger bracket.** In either case, use lumber the same size as the original joist (usually 2 x 6 or 2 x 8.) Outdoor treated wood is a good choice, as it will withstand moisture.



joist hanger bracket

The really important thing is to get to the repairs early, before moisture starts to damage the frame underneath. Once water gets under the floor, the flooring will start to buckle – and the cost and time involved to fix the problem will increase.

Once you're sure the joists are sound, you can install the new flooring. Cut a piece of the flooring about 6" long, and fit its groove along the tongue of the board you're installing. Hammer against this small block as you move it along the board being installed, until the new piece is snug against its neighbor. Then, nail diagonally down through the tongue side of the new board; the nail will be hidden by the groove of the next piece you install. You'll have no exposed nails, reducing the chance of the floor warping.



If you are patching a small area, you may not know what to do when the tongue of your last board sticks out beyond the adjacent piece.

Cut the tongue off, using a circular saw or a hammer and wood chisel, and fit the last piece

in place. Then, nail it down through the top or glue it with construction adhesive.

Don't try to cut the pieces exactly to length before you install them. Cut them a few inches longer than you'll need. When you've nailed all the pieces in place, snap a chalk line across all the boards, and cut off the ends with a circular saw.

Unless your new flooring is outdoor treated wood, paint it right away with an oil-base primer and polyurethane deck enamel, to prevent the wood from warping. Then, have a lemonade and enjoy the solid porch flooring under your feet.

Financial Assistance Programs from Home Repair Resource Center



As winter comes to an end, you may be planning the home repair projects you will be doing this year. Before you start, check out HRRC's Financial Assistance Programs. In addition to providing help with "do-self" repairs through Project Repair, Home Repair Resource Center has programs for Cleveland Heights homeowners who need to borrow funds for bigger home repair and improvement projects.

For homeowners with a limited income, (see Low- and Moderate-Income guidelines below), HRRC offers special benefits to lower your monthly payment – and thus make the repair more affordable:

- Our Assist 0% benefit provides a **grant that pays the interest cost**. You repay the bank only the cost of your repairs – the same amount you'd pay if you had a NO-INTEREST LOAN! Payments can be as low as \$40 or \$50 a month!
- Our Assist Incentive Grant provides a **\$1,000 grant** toward replacing your roof, heating, electrical or plumbing systems. The grant must be used with the 0% loan, reducing the amount that is financed.
- Our Assist Grant for Seniors provides a **\$1,500 grant** towards the cost of replacing a roof or furnace for homeowners age 62 and older. This grant must also be used with one of HRRC's 0% loan programs, and will reduce the amount that must be borrowed – and the monthly payment.

Low-Moderate Income Guidelines

We have not yet received the new guidelines from HUD for 2011, but the guidelines for 2010 are listed below. Amounts refer to the maximum anticipated total gross income for all adults in the household for the next twelve months.

family of 1 – \$36,300	5 – \$56,000
2 – \$41,500	6 – \$60,150
3 – \$46,700	7 – \$64,300
4 – \$51,850	8 – \$68,450

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Need to Borrow for Repairs?

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- Our Assist Deferred Loan Match allows **deferral of half the cost** of replacing one or more major systems: roof, heating, electrical, plumbing or sewer (maximum \$10,000 deferred). The deferred half has **NO interest and NO monthly payment** and doesn't have to be repaid until you sell, move or refinance, or if title to the home is changed. You can borrow the other half of the repair cost at no interest, or provide it from your own resources. Since only 1/2 the cost is financed, the payments are lower – a big help if your budget is tight.

Think you can't qualify for a bank loan? HRRC also has a program *for homeowners of any income* who can't qualify for conventional bank financing because of past credit problems, not enough equity, too much debt, or other reasons:

- If you can afford a monthly payment, our Challenge Fund may be able to help you get bank financing by providing a **loan guarantee**. Not only can you repair your home, you can also rebuild your credit!

So, make Home Repair Resource Center your first stop when you're exploring financing options. In addition to the services we offer, we're familiar with City programs and two special loans from the County, so through our office you can decide which program(s) will best meet your needs.

Remember – we're not a finance company, we don't profit from the loans we arrange, and we don't push. Call 381-6100 for more information.

* * * * *

The **City of Cleveland Heights** also offers programs to help with home repairs. For most programs, LMI income guidelines and residency requirements apply. Programs include:

- No-Interest Loan for larger projects (\$8,500 - \$35,000)
- Emergency/Short-Term Deferred Loan to delay repayment for emergency health and safety repairs
- Paint Program for seniors and disabled homeowners
- Deferred Loan for seniors and disabled homeowners
- Violation Repair Program for seniors and disabled homeowners



For further information, or to apply for City programs, call Lori Sanford in the City's Housing Preservation Office at 291-4869.



Workshop Schedule

Our May workshops will be held in HRRC's Teaching Center. In June, we will move outside, with workshops held at the homes of Project Repair participants who have volunteered their repairs for class projects. (Note the earlier start time!)

All classes are open to Cleveland Heights residents. We ask participants to pay a small **materials fee** to help offset the cost of workshop supplies. (*See our website for details, or call us for more information.*) Call 381-9560 to save your spot.

A brief reminder: If you need a new "punch card" for an on-site workshop, please be aware that we cannot make cards away from the office. If you call in advance, we can prepare a card for you to purchase when you come for the class.

May

Laminate Flooring

Monday, May 2nd, 7 - 9 p.m.

If you're considering laminate flooring (Pergo™, etc.) this class may help you decide which product will best fit your needs. We'll show various materials and how each is installed.

Flat Roof Replacement

Monday, May 9th, 7 - 9 p.m.

Learn how to replace a "flat" roof over a porch or shed-type garage using cold process **modified bitumen roofing**, which lasts far longer than traditional asphalt roll roofing.

Shingled Roofs & Flashing

Monday, May 16th, 7 - 9 p.m.

Learn the right way to replace a shingled roof – minimizing leaking and ice build-up – and replace torn or missing shingles.

Gutters & Downspouts

Monday, May 23rd, 7 - 9 p.m.

Learn how to connect and hang gutters at the proper pitch. We'll discuss sectional vs. seamless gutters, metal gauges, and how to replace rotted fascia boards and rafter ends.



June

Underground Wiring

Monday, June 6th, 6:30 - 8:30 p.m.

Learn what's involved in burying the electrical service to your garage. We'll talk about code requirements for underground wiring, and then show you how to dig the trench, run wires through conduit, drill a hole in the house foundation, and hook up the wires at the service panel and garage.

Garage Trim Replacement

Monday, June 13th, 6:30 - 8:30 p.m.

You'll learn how to replace rotted trim pieces around a garage door. We'll discuss various materials available for this job, and the advantages and disadvantages of each.

Gutter Installation

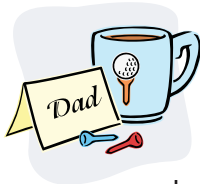
Monday, June 20th, 6:30 - 8:30 p.m.

You'll learn how to connect end caps and downspout, then use hidden hangers to attach a gutter to the back wall of a garage and ensure that it's at the proper pitch.

Tuckpointing

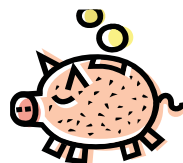
Monday, June 27th, 6:30 - 8:30 p.m.

Tuckpointing (replacing deteriorated or missing mortar between bricks) is an easy do-self repair in most situations. We'll show you techniques for a neat and attractive job.



HRRC's Financial Fitness/ New Home Buyer Classes

Home Repair Resource Center's interactive Financial Fitness series will help you develop your money skills, provide you with strategies for improving your credit, and teach you how to protect your home investment. All are scheduled for 6 - 8 p.m. at the CH-UH Main Library, 2345 Lee Road. Call **381-6100** for information or to reserve your spot in these FREE classes:



May	5	Thursday	Creditworthy Equals Choices
	12	Thursday	Power of a Personal Budget
	19	Thursday	Understanding Mortgages
	26	Thursday	Avoiding Mortgage Delinquency
June	9	Thursday	Power of a Personal Budget
	16	Thursday	Creditworthy Equals Choices
	23	Thursday	Understanding Mortgages
	30	Thursday	Avoiding Mortgage Delinquency



*Free advice
from the experts . . .*

information sessions presented by

Home Repair Resource Center

a community nonprofit organization

Planning Your New Garage

John Keeley, Lally Garage Builders

If you are planning a new garage, there are many options to consider regarding design and materials. Learn how choices of layout, foundation type, and siding and roofing materials can affect quality and longevity.

Tuesday, May 24th, 2011 - 7 pm

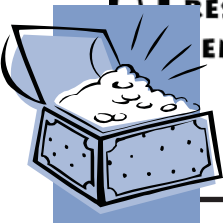
HouseMender University sessions are free and open to residents of any community. Sessions will be held at

**Cleveland Heights - University Heights
Public Library
2345 Lee Road**

Reservations requested – call (216) 381-9560



**HOME
REPAIR
RESOURCE
CENTER**



Volunteers needed:

Home Repair Resource Center is planning a clean-up day on Tuesday, May 24th, from 1 to 5 p.m. If anyone would like to work with us to tidy up the landscaping on our property, we would appreciate your efforts. Call Kathryn at (216) 381-6100 to offer your help.

Free gardening classes part of fundraising event to benefit HRRC



Mark your calendar! Between April 17th and May 1st, all purchases of materials and gift cards at **Bremec on the Heights Garden Center** will result in a donation to Home Repair Resource Center.* (Pick up a voucher at the store to make sure your purchase “counts” for HRRC.) As part of this special event, Bremec’s will offer several free workshops:

Saturday, April 23

11 a.m. Pruning Trees

Learn how to prune properly, to maintain the beauty, health, and vigor of your ornamental plants.

2 p.m. Basic Gardens

Learn how to work with sun, soils, drainage, and other ingredients for a beautiful garden.

Saturday, April 30

11 a.m. Pruning Shrubs

Learn how to prune properly, to maintain the beauty, health, and vigor of your ornamental plants.

2 p.m. Basic Gardens

Learn how to work with sun, soils, drainage, and other ingredients for a beautiful garden.

Sunday, April 24

11 a.m. Harvesting the Rain

Put Mother Nature to work for you, capturing the rain to simplify and sustainably water your gardens.

2 p.m. Cottage Gardens

Learn how to mix herbs, flowers, vegetables, and ornamental plants in small spaces, creating cottage gardens that are beautiful, bountiful, and sustainable.

Sunday, May 1

11 a.m. Harvesting the Rain

Put Mother Nature to work for you, capturing the rain to simplify and sustainably water your gardens.

2 p.m. Cottage Gardens

Learn how to mix herbs, flowers, vegetables, and ornamental plants in small spaces, creating cottage gardens that are beautiful, bountiful, and sustainable.

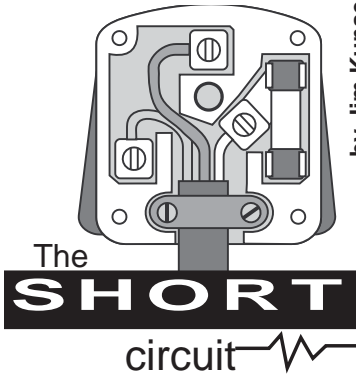
Call (216) 932-0039 for workshop reservations.

BREMEC
on the Heights
Garden Center

Bremec on the Heights is located at 13410 Cedar Road, just west of Taylor.

Gift cards are available, so you can make your purchase later and still help HRRC.

**Excludes contractor & commercial sales, and service charges (such as delivery charges or tree planting fees.)*



by Jim Kunselman

With all the recent strides in automotive engineering, you may be considering buying an electric vehicle or a plug-in hybrid vehicle. (We'll refer to both types as "EVs.") EVs will help lessen our reliance on imported fuels, but they do require another power source – electricity. They are powered by a large battery pack that needs a home-based charging system in order to "re-fuel." In the Chevrolet Volt, for example, the charger is installed in the vehicle; in other brands, the charger might be in a garage or in a weatherproof unit that stands outdoors, along the driveway. Regardless of placement, most garages

and some older houses will need to be rewired to accommodate the charging equipment.

The EV charger should be on a "dedicated" circuit, with no other fixture or appliance on that circuit. (You wouldn't want the circuit breaker to trip because someone used the garage door opener or turned on the lights.) The National Electric Code® (NEC) details a number of safety requirements, including over-current trip, leakage current to ground protection (GFCI), and an automatic shut-off feature for when – not if – someone drives off with the cable still plugged into the car.

Because the charger is operating for hours at a time, the 2011 NEC® specifies that "*Electric vehicle supply equipment shall have sufficient rating to supply the load served. For the purposes of this article, electric vehicle charging loads shall be considered to be continuous loads.*" That means that the electric service to your home (from the pole to your house) must carry enough power to supply a constant charge to your vehicle. You should consult a licensed electrician to evaluate the capacity of your electric system to ensure that you are ready to install an EV charger. Heavier wiring to the garage, and possibly to the house, may be required.

Charging methods have been standardized by the Society of Automotive Engineers (SAE). Approved in 1996, SAE Standard J1772 specifies three levels of chargers. Recent updates describe the design of a standard connector (plug) for attaching power to the EV at Levels 1 and 2.



Approved plug for Level 1 and Level 2 charging (© Society of Automotive Engineers)

Level 1 – A Level 1 charger is rated at 120 VAC and 20 amperes (amps) and will plug into grounded electrical receptacle outlets. At this level, fully charging an EV could take 8 to 24 hours, depending upon

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The Short Circuit

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battery size and its discharge level. This is not meant as the primary charging technique. SAE suggests that EVs carry a portable Level 1 unit that can be plugged into any available 120 VAC grounded receptacle for emergency or “top-off” charging.

Level 2 – A Level 2 charger is to be used for everyday EV charging. It is rated to run from a single-phase branch circuit (similar to an electric dryer circuit) operating at 240 VAC and 30 amps. Charging time to fully charge the EV at this rate will generally range from 4 to 10 hours, depending on battery size and discharge level.

Level 3 – Level 3 standard is for “Fast Charging,” similar to refueling at a service station. The charger is supplied by 480-VAC, three-phase equipment, and would reach a 50% charge in 10 to 15 minutes. A separate connector would supply DC from the off-board charger directly to the battery.

Because the charger is operating for hours at a time, the electric service to your home (from the pole to your house) must carry enough power to supply a constant charge to your vehicle. You should consult a licensed electrician to evaluate the capacity of your electric system to ensure that you are ready to install an EV charger. Heavier wiring to the garage, and possibly to the house, may be required.

After many fits and false starts, it appears that the EV era is now with us. The Tesla, Chevrolet Volt, and Nissan Leaf are now being sold in the U.S., and other manufacturers have products that will soon come to market. As in the early days of gas engine vehicles, people are constructing homebuilt EVs from existing cars, motorcycles, and trucks. So, for drivers, it’s “electrifying times” (pun intended.)

Important notice to tool users

HRRC will no longer be able to provide lawn mowers and gas chain saws through our Tool Loan. The models previously in our inventory are no longer working, and budgetary constraints prevent us from replacing them at this time.

Operating support for HRRC is provided by individual donations, foundation grants, and HUD Community Development Block Grant funds through the City of Cleveland Heights.



**HOME
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