Installation Guide

Kebony Shiplap

#K90XX514 – 1×6 Clear 90 Degree Shiplap
#2216 – 1×6 Character 90 Degree Shiplap

Preparing for Installation

GENERAL GUIDELINES

Kebony cladding materials are for outdoor use above the ground and not in ground contact. Local conditions and building regulations must always be taken into consideration. This guide assumes that the installer has the necessary professional competence.

Kebony is a Dually modified™ wood whose properties are permanently changed and enhanced through an eco-friendly process without the use of toxins. Our process yields a stable, long-lasting, and beautiful cladding material. Kebony wood will behave like natural timber and will swell and shrink along with changes in the environment in which it is installed, albeit to a lesser extent.

Pay particular attention to the design and execution of end-grain handling, ventilation, and avoid moisture traps. Some surface cracks and fissures are natural in timber that is installed outdoors without surface treatment. Initially, the runoff of rain from a Kebony surface will have a dark color that may be visible on some light surfaces.

Kebony weathers quickly after installation outdoors when exposed to the elements. A surface color change from brown to grey normally takes place over the first year, while surface cracks and fissures develop within the first months of installation. This is a natural process for wood.

It is a condition of the warranty that the directions in this installation guide are followed.

SAFETY GUIDELINES

Installing Kebony Shiplap siding is a construction project, therefore you should wear protective clothing and safety equipment such as, but not limited to, safety glasses, gloves, long sleeves, and a mask, particularly when cutting wood.

The installer is responsible for identifying and following all building codes and construction safety practices. Kebony accepts no liability or responsibility for the improper installation of this product.

Kebony Shiplap siding may not be suitable for every application, and it is the sole responsibility of the installer to ensure that Kebony Shiplap siding is fit for the intended use. Because all installations are unique, it is also the installer's responsibility to determine specific requirements for each siding application.

Kebony recommends that all applications be reviewed by a licensed architect, engineer or local building official before installation.

STORAGE GUIDELINES

Kebony should not be exposed directly to the elements before installation. Kebony should be kept enclosed in its original packaging or re-wrapped if previously opened. Ideally, Kebony should also be stored indoors or under cover.

Additionally, it's good practice, while actively using an open unit of Kebony, to flip over (reverse) the top boards so that they are face down. This keeps the face of the board from being exposed to the elements prematurely and this will help reduce the likelihood of having boards with different degrees of fading.

PREP

Perform all necessary preparatory work for your specific project, (e.g. building wrap, flashing, window frames, etc.)

Metal Fixture Considerations: Kebony can be fastened to, or be in contact with aluminum, enameled, powder-coated or foiled fixtures without concern for discoloration. In some cases, surface water run-off from Kebony wood can result in the discoloration of adjacent materials. For example, it could cause black stains on zinc fixtures or polished copper.

Drainage and run-off from galvanized or iron-based fixtures onto Kebony can result in black discoloration of the wood. With respect to metal framing, it is important to ensure that there is no direct contact between Kebony and the exposed metal surfaces. This may require the use of a G-tape or some sort of butyl tape to create a separation between the metal and the boards.

Water run-off from Kebony onto copper parts may result in color variations on the copper surfaces. While copper normally goes through surface oxidization to a dark green or black surface color, Kebony will keep copper shiny with the original copper color on the affected surfaces.

RECOMMENDED TOOLS & EQUIPMENT

Electric Saw (Table, Chop etc.)

• 72-tooth or greater saw blade with carbide teeth

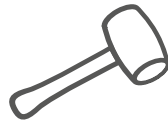**Miter saw**

• 72-tooth or greater saw blade with carbide teeth

Drill (Cordless or Corded)

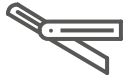• With Carbide Drill Bit for Pre-Drilling
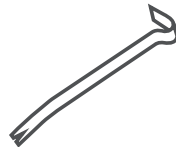
Ladders and/or scaffolding

Rubber Mallet

Level

T-bevel

Hammer

Chalkline

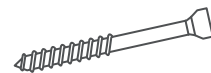**Laser Level**

Flat pry bar

Utility Knife

Measuring Tape

Pencil

Trim Head Stainless Steel Screws (Or Starborn Pro Plug® System for Kebony Clear)

GENERAL INSTALLATION GUIDELINES

Kebony Shiplap siding can be installed horizontally or vertically.

Ground Clearance: Allow for 12" clearance above grade.

Fastener type: Use stainless steel screws made from 304 or 316 stainless depending on site conditions and proximity to seawater.

Clear: Holes must be pre-drilled. Screw head size, length, and stainless steel grades are to be selected by the installer based on site specifics. If using the hidden fastener *Pro Plug® System for Kebony Clear Wood (see below), 2-1/2" screws are included with the System. Follow the edge and end distance fastening rules detailed below. **DO NOT USE NAILS.**

Character: Character can be fastened with either self-drilling stainless steel screws or stainless steel nails. If using screws that are not self-drilling then holes will have to be pre-drilled. Screw head size, length, and stainless steel grades are to be selected by the installer based on site specifics. Follow the edge and end distance fastening rules detailed below.

If using nails, consider blunt-tip diamond point nails with a narrow shank. Use a nail gun with rubber feet and test the nail gun settings to ensure that the nail will be set at the desired depth.

The flatness of the board may be affected by altered product properties and installation configuration. For example, a black finish applied to the surface can heat up very differently than the back of the board and affect the flatness of the board on the wall. Inadequate air space or airflow can cause the same sort of movement.

Face Fastening:

Clear: Face fasteners can be hidden using the Pro Plug® System for Kebony Wood*.

Character: All fasteners are exposed unless you make your own plugs from Character.

Spans:

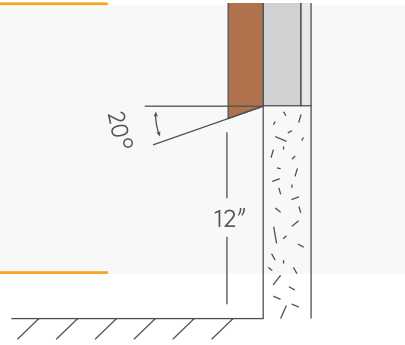Clear: Secure each board at each end, and up to a maximum 24" span between fasteners.

Character:
Horizontal: Secure each board at each end, and up to a maximum 24" span between fasteners.
Vertical: If the wall is less than 9' tall, then secure each board at each end, and up to a maximum 24" span between fasteners. If the wall is more than 9' tall, then secure each board at each end, and up to a maximum 16" span between fasteners.
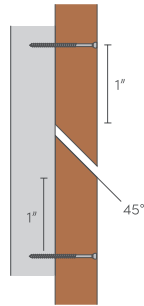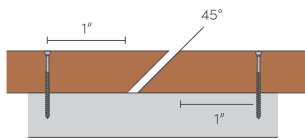
Cross-cutting and Ripping Kebony: It is recommended that all cut faces of both Kebony Clear and Character cladding be treated with an end-sealing wax. This both protects the wood and reduces the risk of ends splitting. Character delivered from the factory should come with an end-sealing wax pre-applied on all ends. We further recommend that you test the end-sealing wax of your choice on some scrap material. Kebony suggests that you consider the following product: https://saicosna.com/exterior/saicos-end-grain-sealing-wax.html

*Pro Plug® System for Kebony Wood is for CLEAR ONLY.

Drip-Edge: To ensure proper drainage, all bottom board edges should be cut on an angle with a drip edge of a minimum of 20 degrees.
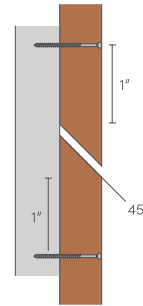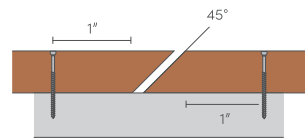
20°

12"

Butt-jointing boards: When butt jointing siding, cut ends at 45 degree angles to form an overlapping joint (Scarf Joint). This is particularly important for vertical installation. Ensure joints meet on studs, blocking or furring strips. The cut should slope downward from the back towards the front.

Do not pre-drill or fasten Kebony Clear within 1" of the side edge.

Do not pre-drill or fasten Kebony Character within 1" of the side edge.

Clear: At the board ends, do not drill within 1" of the end of the board. Always pre-drill.

Character: At the board ends, do not drill within 1" of the end of the board. It is required to always pre-drill at the board ends.

While significantly more stable than most woods, Kebony will still swell lengthwise by about 0.1% when fully saturated. When placing boards in-line and butt-jointing, ensure that you account for this swelling by determining the gap spacing between the two board ends as a function of their respective lengths. This is especially important where multiple end-to-end lengths are used.

*Pro Plug® System for Kebony Wood is for CLEAR ONLY.
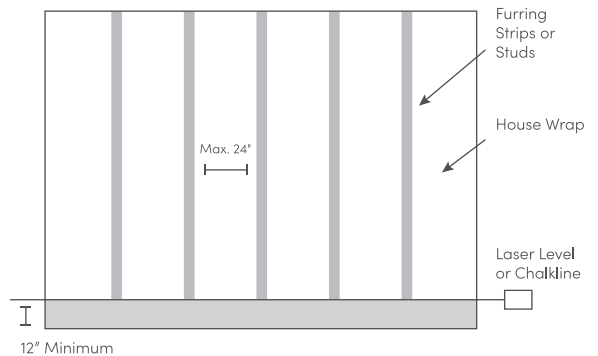
HORIZONTAL APPLICATIONS

Kebony Shiplap must be installed over furring strips. It is important to use furring strips made of a material with durability and lifespan at least as good as that of Kebony.

One option is to use plastic furring strips. Please note that these are commonly non-structural and will require securing the boards/rails into the framing rather than into the plastic furring strips. It is recommended that you confirm with the manufacturer whether or not the strips are structural.

A supplier to consider is Quarrix for their 3/4" ProTect Furring Strip:
https://quarrix.com/Products/Wall-Protection/ProTect-Furring-Strips

1 Begin at the bottom and work up. Set a level line across all walls using a conventional or laser level. Face the channeled edge upward.

Furring Strips or Studs

House Wrap

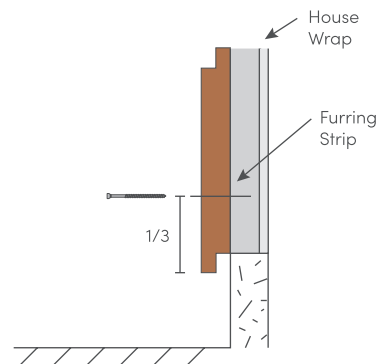Max. 24"

Laser Level or Chalkline

12" Minimum

Clear Shiplap cladding requires pre-drilling and fastening with screws.

Character Shiplap can be fastened with screws or alternatively with nails. Please see the nail detail section on page 5.
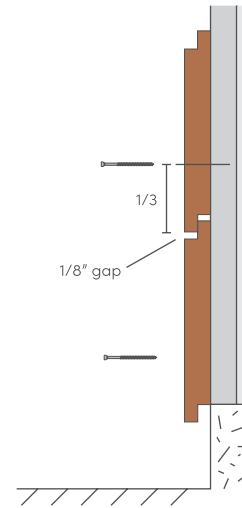
2 With the first bottom board, pre-drill and face fasten the first screw ⅓ of the way up the board. When face-fastening Kebony Clear, you may use the optional *Pro Plug® System for Kebony Clear Wood to hide the screw heads.

House Wrap

Furring Strip

1/3

*Pro Plug® System for Kebony Wood is for CLEAR ONLY.

3 Measure and cut your next board to length. Overlap the board over the bottom board and ensure a minimum ⅛" gap between the boards to allow for expansion of the wood. Pre-drill and face fasten the board ⅓ of the way up the board. When face-fastening Kebony Clear, you may use the optional *Pro Plug® System for Kebony Clear Wood to hide the screw heads.
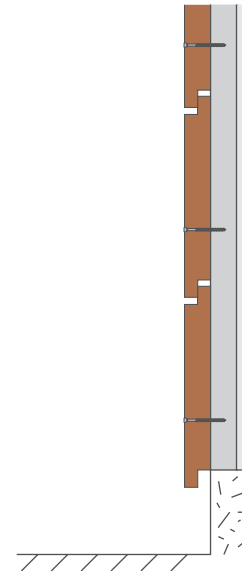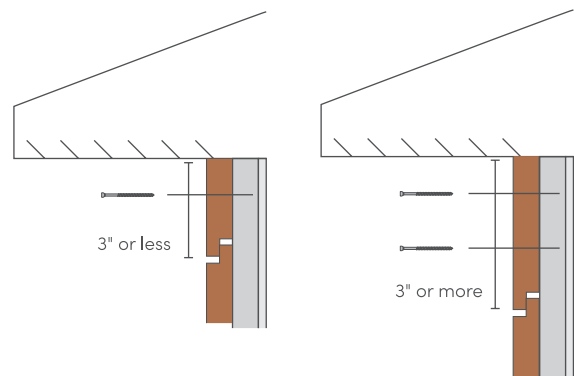
1/3

1/8" gap

4 Repeat this pattern up the wall until you get to the roof line.

5 Top board(s) at the roofline may need to be custom cut. If the top is horizontal, the top board may need to be ripped to width and should also be face-fastened. Use one fastener if the board is less than 3" wide and two fasteners if the board is greater than 3" wide. If the roofline has a slope, multiple boards will likely have to be cut at angles on the end(s). Various tools are available to help determine the angle.

3" or less

3" or more

When ripping or cross-cutting Kebony Character, the exposed heartwood must be treated with an anti-parasite/fungal agent. Follow the manufacturer's instructions.

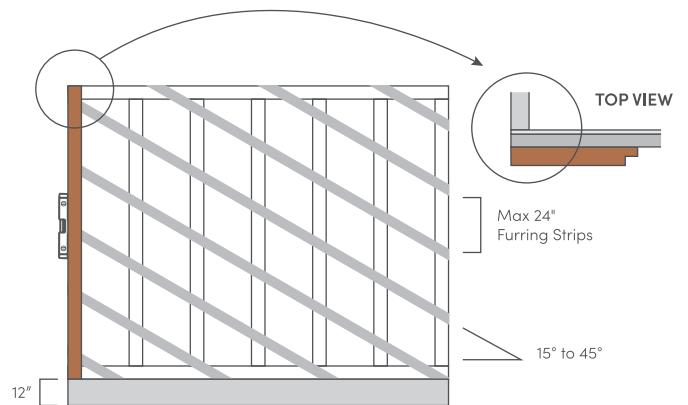*Pro Plug® System for Kebony Wood is for CLEAR ONLY.

VERTICAL APPLICATIONS

Kebony Shiplap must be installed over furring strips. It is important to use furring strips made of a material with durability and lifespan at least as good as that of Kebony.

One option is to use plastic furring strips. Please note that these are commonly non-structural and will require securing the boards/rails into the framing rather than into the plastic furring strips. It is recommended that you confirm with the manufacturer whether or not the strips are structural.

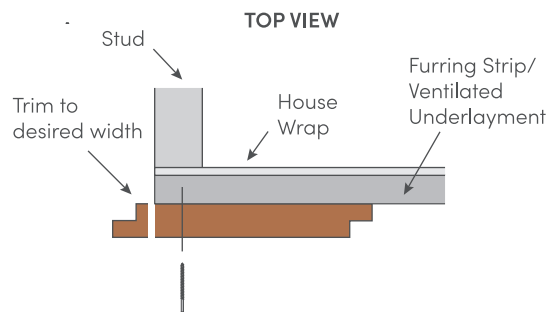A supplier to consider is Quarrix for their 3/4" ProTect Furring Strip:
https://quarrix.com/Products/Wall-Protection/ProTect-Furring-Strips

1 If using conventional furring strips, they must be installed diagonally. Alternatively, as detailed above, plastic furring strips with integrated drainage can be installed horizontally. Start at one corner with the channeled edge toward the adjacent wall. Use a level to ensure the first board is installed plumb. The channeled edge may need to be trimmed to ensure a flush fit.

Kebony Character installed vertically over 9' requires 16" fastener spacing rather than 24".

TOP VIEW
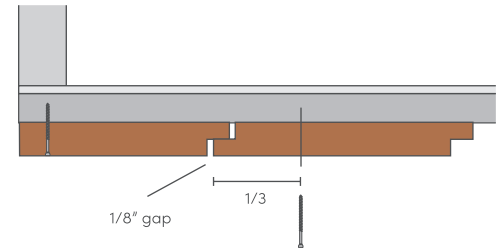
Max 24"
Furring Strips

15° to 45°

12"

Corners details are the choice of the architect and project owner. There are many options including, but not limited to, mitered corners, corner boards, trim boards, flush, beveled, lap, etc.

2 Pre-drill and face screw the half of the first board closest to the edge. When face fastening Kebony Clear, you may use the optional *Pro Plug® System for Kebony Clear Wood to hide the screw heads.

TOP VIEW

Stud

Trim to desired width

House Wrap

Furring Strip/ Ventilated Underlayment

*Pro Plug® System for Kebony Wood is for CLEAR ONLY.

3 Measure and cut your next board to length. Overlap the board over the first board and ensure a minimum ⅛″ gap between the boards to allow for expansion of the wood. Pre-drill and face fasten the board ⅓ of the way up the board. When face-fastening Kebony, you may use the optional Pro Plug® System for Kebony to hide the screw heads.

1/3

1/8″ gap

4 Repeat this pattern across the wall.

*Pro Plug® System for Kebony Wood is for CLEAR ONLY.