

Linear 1000

Log set, and modern media installation

Experience has shown that the majority of performance problems are caused by burn media being installed incorrectly. Please take the time to read and follow these instructions as malfunctioning due to incorrect burn media placement is not covered by warranty.

YouTube videos

We also have burn media installation videos on the Rinnai NZ YouTube channel.



- Linear 1000 - Designer Log Set Installation
<https://www.youtube.com/watch?v=Q8L9dD5STd4>
- Linear 1000 & 1500 - Modern Media Installation (4 mins)
<https://www.youtube.com/watch?v=E70qe9nt4rl&t=5s>

The Linear MUST NEVER be used with other burn media or burn media that is damaged. The Linear burn media sets are different and cannot be interchanged, ensure you have the correct set before installation.

Correct placement

It is important to place the burn media in the correct position. Incorrect placement can create carbon build-up (sooting) and affect performance.

IMPORTANT



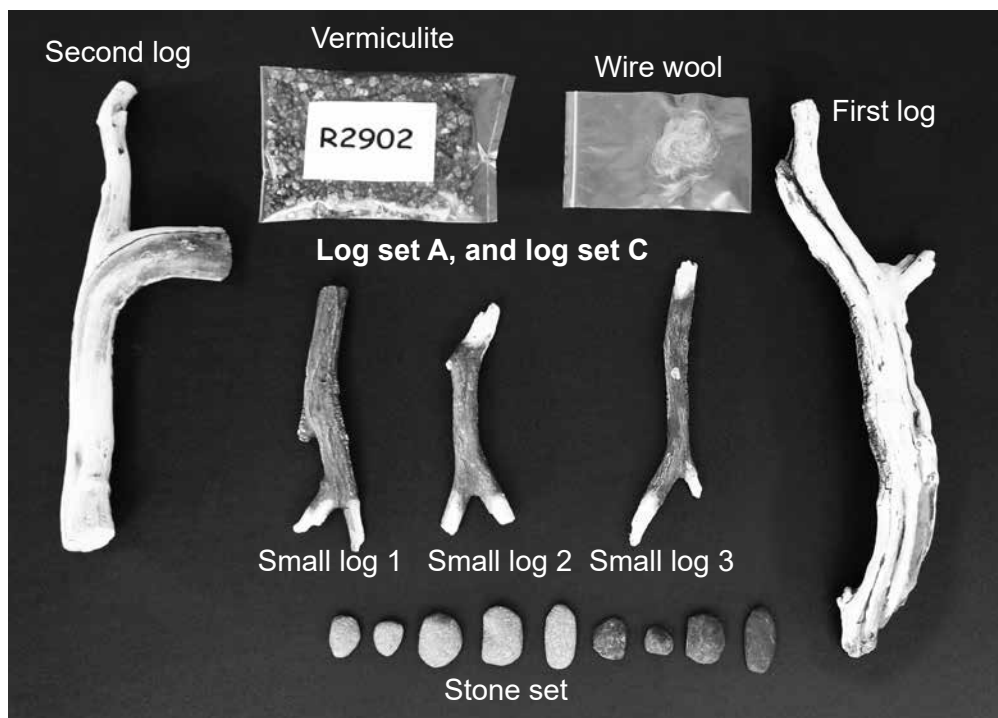
Ensure the gaps between the burners are kept clear of any vermiculite or crushed glass. This is important as these gaps provide secondary air to the unit. A tip to stop any burn media going into the gaps is to place the installation guide in the burner gap while placing the vermiculite or crushed glass over the burner.

Log set

The logs have a charred section on them and when correctly installed, the charring will always be face down.



Linear 1000 log set



Before starting the installation, carefully unpack the entire burn media set. Inspect each part for damage and lay them out as shown above, making sure that everything has been supplied. Use this guide and the one-page sheet fixed to the fire for further guidance.

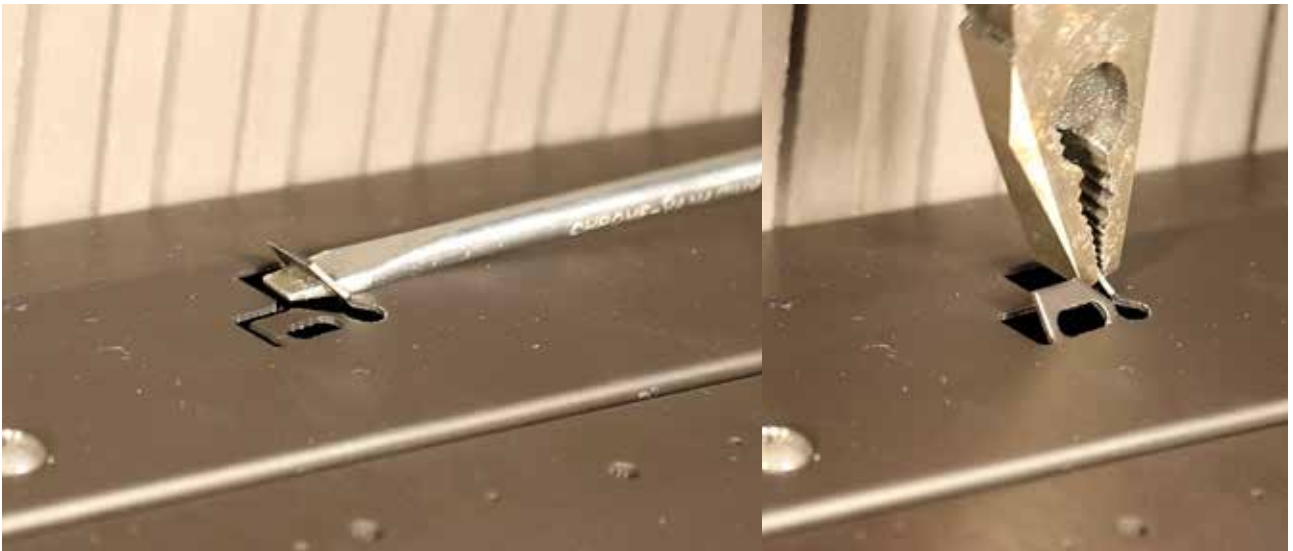
These instructions show a single sided fire, but the process for the double sided is the same as long as the media is installed from the front of the fire, with the pilot to the back of the burner.

It is important to note that the NZ LPG burner differs from the natural gas burner, this is indicated by a 'U' stamped in the left hand corner.



There are four log location points along the burner and burner surrounds. These need to be folded up before proceeding any further, refer image on next page.





Place a thin layer of vermiculite across the entire burner bed. Don't pour the vermiculite, there will be dust that has settled in the bag, this can block the burner ports and cause cross lighting and performance issues with the fire.

Avoid putting excessive vermiculite over the burner ports at this stage. The first layer should use less than a third of the vermiculite.

Make sure the burner ports in front of the pilot and main burner flame rod are not covered, circled below.



Start the fire and make sure that the flames track across the entire burner bed. Move the vermiculite around as required.

You may need to use the remote control or control panel to keep the fire burning on high.



First log

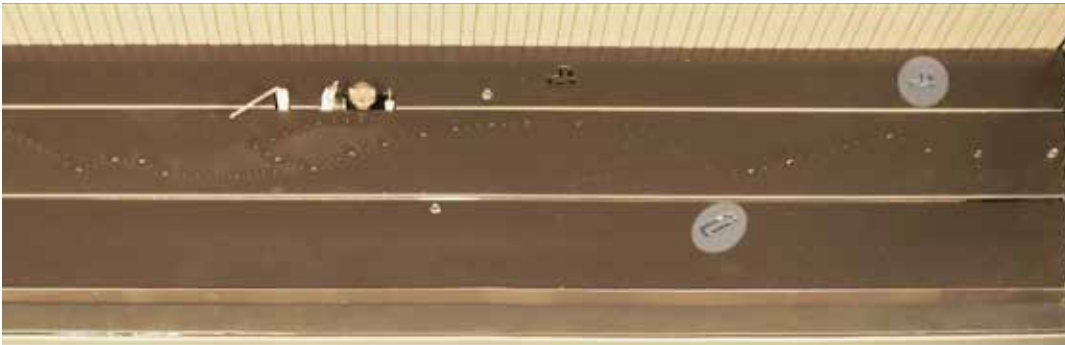
Take the first log and carefully lay it over the burner using the location tab behind the pilot and the tab on the burner surround. Notice how the log sits in the front of the location tab.

Make sure there is a clear path in the vermiculite where the log crosses the burner. The logs have a charred section on them, and when correctly installed, the charring will always be facing down.



Second log

Take the second log and install it using the tabs as a location guide. Note how the vermiculite has been cleared away from the left hand end of the log.



Three remaining smaller logs

Continue fitting the three smaller logs using the colour installation sheet on the front of the appliance as a guide.





Light the burner and check for complete cross-lighting. Force the fire into high burner mode using either the remote control or the front control panel. Adjust the vermiculite if required. It may be necessary to clean out some of the bigger burner ports (circled below) but sometimes a larger piece of vermiculite can help with cross-lighting or diffusing a flame.



Remaining vermiculite

Make sure there is minimal impingement on any of the logs or smaller logs, and adjust if necessary. This is especially important for LPG or propane fires.

If the flames look to be leaning back too much, try briefly fitting the glass front and see what it will look like under normal operation. Don't worry if the flames look a bit dull at this stage, when the wire wool is installed, the flame will improve.

Place the remaining vermiculite on the burner surrounds. This is a decorative aspect of the installation and can be adjusted to customer requirements. If they only want vermiculite on the burner, that's ok, and similarly, if they want the vermiculite spread across the entire burner, that's ok too.

Do not place more vermiculite on the burner itself at this stage. take care not to block the gap between the burner and the front and back surrounds. This gap is required for secondary air to get to the burner.



Stones

Place the stones using the colour installation sheet as a guide. These are decorative and are not necessary if the customer doesn't want them used. Rinnai recommends using them to camouflage the places where the log location tabs are visible. Take care not to directly block any of the burner ports.

If you are setting up a double-sided fire, make sure it looks good from both sides.

Start the fire again and make sure that the burner lights completely. Force the fire into high burner mode using either the remote or the front control panel. Adjust the stones and vermiculite as required.



Wire wool

Take the wire wool out and tease into thin strands. There is nothing to be gained by having a thick rope of wire wool.

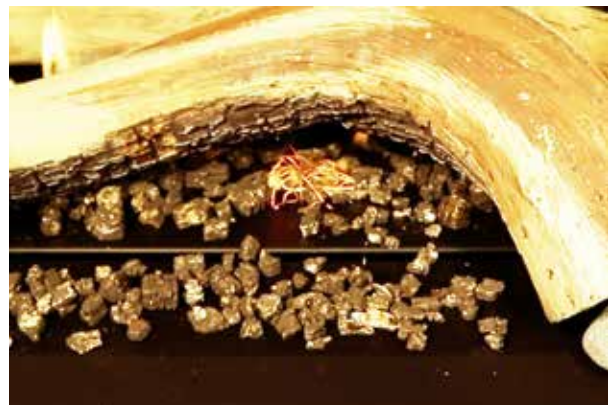
Most installations will use less than a third of the supplied wool. The remainder of the wool can be left with the customer or can be used as a replacement when the fire is serviced.

The wool is used to enhance the flame, but if the customer doesn't like it, it doesn't have to be installed.



Place thin strands of wire wool over the flames to make them brighter and more vibrant. There is no benefit in having wool where there is no flame, and having too much wool can make the flames too yellow and streaky, and will look odd when the fire is off.

Be careful to avoid getting the wire wool anywhere near the flame rods. If you find that the fire is cutting out, there is a good chance that it is a strand of wool shorting out one of the flame rods. If there is a loss of flame or a short circuit on either the pilot or the main burner flame rod for more than five seconds, the fire will shut down.



Checking the final assembly

Once you are happy with the way the flame bed looks, replace the glass and start the fire. Make sure that you are getting good cross-lighting and that there is no impingement or long streaky flames that might cause sooting.

It is important to leave the fire running for at least ten minutes to get a good idea of how yellow the flames might get and if there are any patches of major impingement on any of the logs. These need to be fixed to prevent soot appearing on the logs, especially with LPG or propane installations.



Linear 1000 modern media



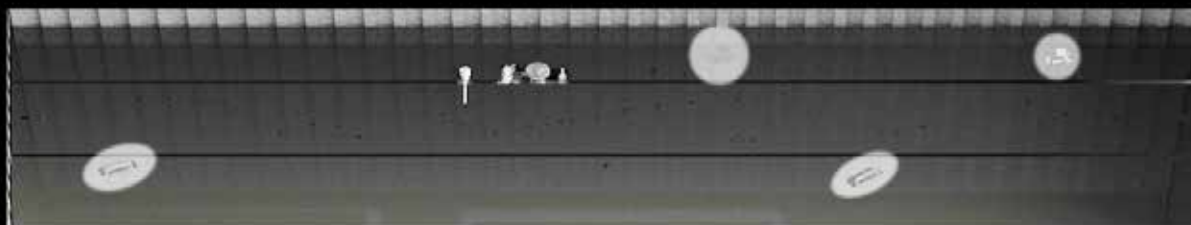
Before starting the installation, carefully unpack the burn media set. Inspect each part for damage and lay them out as shown above, making sure that everything has been supplied. Use this guide and the one-page sheet fixed to the fire for further guidance.

These instructions show a single sided fire, but the process for the double sided is the same as long as the media is installed from the front of the fire, with the pilot to the back of the burner.

Note that this is specialty glass, there is a risk of damage to the fire if anything other than Rinnai supplied products are used.

There are log location tabs along the burner and burner surrounds. These are not used when installing the glass media. The tabs in the burner surround should be left flat. If changing from a log set to glass, flatten these tabs before proceeding. The tabs on the burner top can be left folded up.

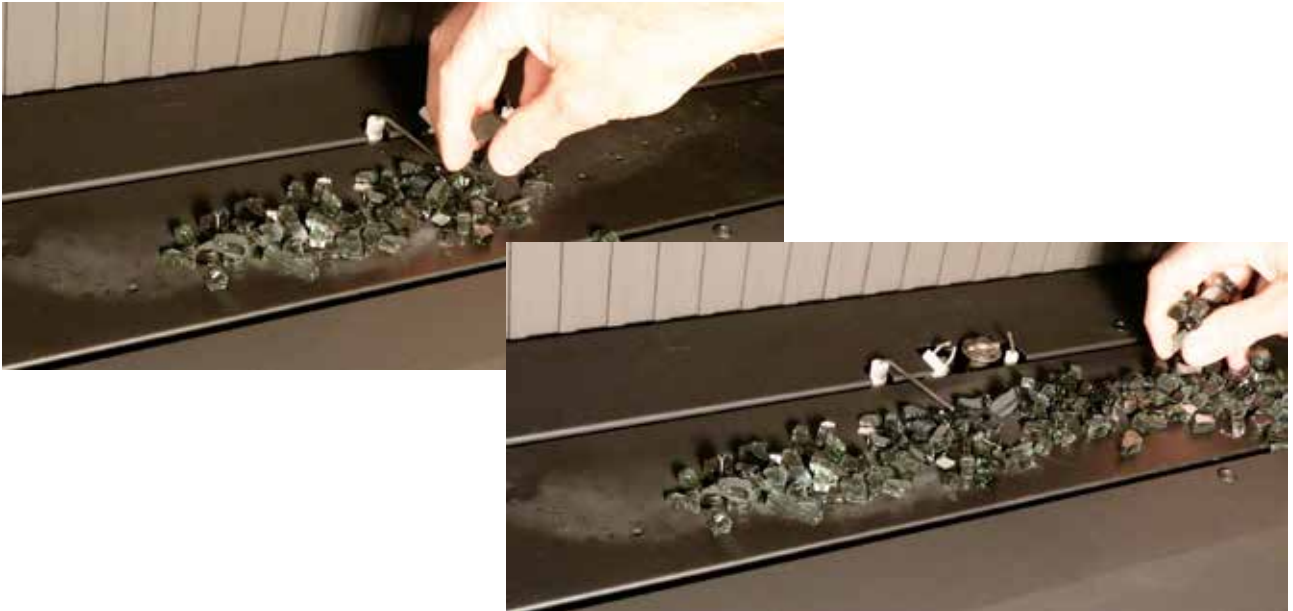
Log location tabs



Start using the smaller bag of glass. Spread out a thin layer across the entire burner top. Don't pour the glass out, as there will be dust that has settled in the bag. This can block the burner ports and cause cross-lighting and performance issues with the fire.

Try to avoid putting excessive glass over the burner ports at this stage.

You should not require much more than the smaller bag of glass on the burner to start with.



Start the fire and make sure that the flames track across the entire burner bed. Move the glass around as required.

These instructions have images using natural gas, the flames will behave differently when using LPG or propane, but the principles are the same. You may need to use the remote control or control panel to keep the fire burning on high.



Wire wool

Take the wire wool out and tease it into thin strands. There is nothing to be gained by having a thick rope of wire wool.

Most installations will use less than a third of the supplied wool. The remainder of the wool can be left with the customer or can be used as a replacement when the fire is serviced.

The wool is used to enhance the flame, but if the customer doesn't like it, it doesn't have to be installed.



Place thin strands of wool over the flames to make them brighter and more vibrant. There is no benefit in having wool where there is no flame, and having too much wool can make the flames too yellow and streaky, and will look odd when the fire is off.

Be careful to avoid getting the wire wool anywhere near the flame rods. If you find that the fire is cutting out, there is a good chance that it is a strand of wool shorting out one of the flame rods. If there is a loss of flame or a short circuit on either the pilot or the main burner flame rod for more than five seconds, the fire will shut down.



You can now install the remaining glass. How much of the fire base you cover with the glass is up to the customer. If they only want glass on the burner that's fine, but they need to be aware that the log locating tabs in the burner surrounds will be left visible. Our recommendation is to place a layer of glass between the burner and the fold on the burner surrounds, but some customers prefer to have glass across the entire fire base.

Make sure that the gap between the burner and burner surrounds is left clear of glass, this gap is required for secondary air to reach the burner.



Fit the glass front and make sure that you are getting good cross-lighting and that there are no long streaky flames that might cause sooting.

It is important to leave the fire running for at least ten minutes to get a good idea of how yellow flames might get and if there are any flames that might be sooty. These need to be fixed by either clearing the glass away from the burner ports or moving any wire wool that is causing flames to join together. This is especially important with LPG or propane installations.



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** Cost of a local call higher from mobile or public phones*

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