How To Make Viking Ship

How To Make Viking Ship *Downloaded from* everybodystreet.com *by Riley & Curtis*

INTRODUCTION: THE LEGACY OF NORSE NAVAL ENGINEERING

For centuries, the Viking longship has captured the human imagination. These remarkable vessels, which carried Norse explorers, traders, and warriors across vast oceans and up shallow rivers, were masterpieces of maritime engineering. Understanding **how to make Viking ship** models or even full-scale replicas requires a deep appreciation for the materials, tools, and techniques that made these ships legendary. Whether you are a history enthusiast, a woodworking hobbyist, or a museum curator seeking authentic reconstruction, the process of building a Viking ship connects you directly to a thousand-year-old tradition of craftsmanship.

The iconic Viking ship, or *langskip*, was not merely a means of transport. It was a symbol of status, a tool for exploration, and a weapon of war. Its distinctive overlapping planks, known as clinker or lapstrake construction, created a hull that was both lightweight and remarkably flexible. This design allowed Viking ships to handle the brutal conditions of the North Atlantic while also being light enough to be carried overland between waterways. In this guide, we will explore every facet of the shipbuilding process, from selecting the right timber to raising the mast and setting the sail. By the end, you will have a thorough understanding of **how to make Viking ship** construction a reality in your own workshop.

THE HISTORY AND DESIGN PRINCIPLES BEHIND VIKING SHIPS

Why the Longship Was So Effective

Before diving into the practical steps of **how to make Viking ship** structures, it is essential to understand the design philosophy. Viking ships were built using a shell-first method. This means the outer planking was created and shaped first, and the internal framing was added afterward. This technique is the opposite of modern shipbuilding, where a skeleton is built first and then covered. The shell-first method produced a hull that was incredibly strong for its weight. The flexibility of the overlapping planks allowed the ship to twist and flex with the waves rather than fighting against them.

Another key design feature was the shallow draft. A typical Viking longship might draw only three to four feet of water. This allowed the crew to beach the vessel almost anywhere, making it perfect for raiding and exploration. The symmetrical bow and stern also meant the ship could reverse direction quickly without turning around, a significant tactical advantage. When learning **how to make Viking ship** models or replicas, you must replicate these design elements to achieve an authentic result.

Types of Viking Vessels

It is important to note that not all Viking ships were long warships. There were several types, each serving a different purpose:

- **Longships (Langskip):** These were the warships, built for speed and carrying many warriors. They were long, narrow, and shallow.
- **Knarr (Knörr):** These were the cargo ships, broader and deeper than longships. They were built for capacity and stability rather than speed.
- **Færing:** A small four-oared open boat, often used for fishing or transport between islands.
- **Karvi:** A medium-sized ship, often used for both warfare and trade.

When you research **how to make Viking ship** projects, decide which type you want to build. A small faering is a manageable first project, while a full-size longship replica requires a team of skilled shipwrights and significant resources.

ESSENTIAL MATERIALS FOR BUILDING A VIKING SHIP

Choosing the Right Wood

The choice of timber is the single most important factor in Viking ship construction. The Norse shipbuilders primarily used oak (*Quercus robur*) for the keel, frames, and planking. Oak is strong, durable, and resistant to rot. It splits cleanly along the grain, which is essential for creating the long, straight planks needed for clinker construction.

Pine was often used for the mast, and ash or birch might be used for smaller components such as oars and the tiller. The wood was typically harvested in winter when the sap was down, making the timber more stable and less prone to insect infestation. The natural curves of trees were used to advantage. A curved branch might become a knee brace, and a naturally bent trunk could form the stem or sternpost.

If you are learning **how to make Viking ship** parts on a budget or for a model, you can substitute domestic hardwoods such as ash, elm, or even marine-grade plywood for the planking. However, for authenticity and structural integrity, nothing beats clear, straight-grained oak.

Essential Tools of the Viking Shipwright

The Vikings did not have modern power tools. Yet, their craftsmanship was incredibly precise. To authentically learn **how to make Viking ship** structures, you should understand their tool kit:

- **Axe (Skeggøx):** Used for felling trees, shaping logs, and hewing planks. The broad axe was the primary shaping tool.
- **Adze:** Used for smoothing and hollowing out curved surfaces, such as the inside of planking.
- **Drawknife:** Used for shaping and smoothing smaller pieces of wood.
- **Knife:** Used for fine carving and detail work.
- **Auger (Hand drill):** Used for drilling holes for rivets and treenails.
- **Mallets and Chisels:** Used for joinery and carving.
- **Saws:** While used, they were less common than axes in Viking times.

Modern builders can use bandsaws, planers, and sanders to speed up the process, but many purists insist on using traditional hand tools to achieve the authentic look and feel of a Viking ship.

STEP-BY-STEP GUIDE: HOW TO MAKE VIKING SHIP CONSTRUCTION A REALITY

Step 1: Laying the Keel

The keel is the backbone of the ship. It is the first piece laid down and the most critical. For a typical longship, the keel was a single long piece of oak, often 50 to 70 feet long. It was shaped with a slight curve (rocker) to give the ship its distinctive profile. The ends of the keel were tapered and shaped to receive the stem and sternpost.

When considering **how to make Viking ship** keels, you must ensure the wood is free from knots and cracks. The keel must be straight along its length but curved upward at the ends. This rocker is essential for maneuverability. The keel is typically supported on blocks in the shipyard, and it must be perfectly level and aligned before any planking begins.

Step 2: Erecting the Stem and Sternpost

The stem (front) and sternpost (back) are attached to the ends of the keel. These are usually single pieces of oak, curved upward and carved into a sleek, sweeping shape. The joint between the keel and the stem is a scarph joint, which is a long, slanted overlap that is fastened with wooden pegs (treenails) or iron rivets.

This joint must be watertight and structurally sound. In Viking times, they used iron rivets that were hammered through the wood and clinched over a rove (a small washer). This technique is still used by modern replica builders. Mastering this joint is a critical step in learning **how to make Viking ship** hulls that are both strong and authentic.

Step 3: Planking the Hull (Clinker Construction)

This is the heart of the Viking shipbuilding process. The planks, called strakes, are laid overlapping each other. The bottom plank (garboard strake) is attached to the keel. The next plank overlaps the one below it, and so on, working upward on both sides simultaneously.

Each plank is carefully shaped using an adze and drawknife. The edge of the overlapping plank is beveled to fit snugly against the one below. The planks are fastened together with iron rivets spaced about six inches apart. The rivets are driven from the outside, and the point is clinched over a rove on the inside.

When learning **how to make Viking ship** planking, pay close attention to the curvature. The planks near the bow and stern must be twisted and bent to follow the shape of the hull. This is done by steaming the wood or by using green (freshly cut) wood, which is more pliable. The Vikings often used green oak for this reason.

Step 4: Installing the Internal Framing

Once several planks are in place, the internal frames (ribs) are added. Unlike modern construction, the frames are fitted to the shell of the planking, not the other way around. Each frame is a single piece of oak, often using the natural curve of a tree branch. The frames are fastened to the planking

with treenails or iron spikes.

The frames give the hull its transverse strength and provide attachment points for the deck and other internal structures. In a longship, the frames are widely spaced to keep the weight down. This is a key distinction when you study **how to make Viking ship** designs, as the open spacing contributed to the ship's speed and flexibility.

Step 5: Adding the Keelson, Stringers, and Deck

The keelson is an internal timber that sits on top of the keel, inside the hull. It provides additional longitudinal strength and serves as the base for the mast step. Stringers (longitudinal supports) are added along the sides to stiffen the hull.

The decking is usually made from loose planks that can be removed for access to the bilge. In longships, the deck was often partial, with only a small platform at the bow and stern. The central area was open, with seats for rowers. When building a replica, you must decide how much decking to include based on the historical accuracy you desire.

Step 6: The Mast, Sail, and Rigging

The mast is a single, straight piece of pine or spruce. It is stepped into the mast step on the keelson and passes through the deck. The mast is held in place by a massive block of wood called the mast partner. The sail was made from wool, often dyed in colorful stripes or patterns. It was square-rigged, meaning it was hung from a horizontal yard (crossbeam).

The rigging consisted of ropes made from hemp or animal hide. The shrouds (side stays) and forestay supported the mast. The sheets (ropes attached to the corners of the sail) were used to control the sail. Understanding the rigging is essential if you want to know **how to make Viking ship** models that are fully functional and historically accurate.

Step 7: Final Fittings and Launching

The final steps include adding the rudder (a side-mounted steering board on the starboard side), the oars, the anchor, and any decorative carvings. The iconic dragon head was often removable, as it was considered bad luck to have it in place when approaching land peacefully.

The hull is typically sealed using a mixture of tar and animal hair (caulking) driven into the seams between the planks. This makes the hull watertight. Once the caulking is set, the ship is ready for launching. Launching a Viking ship is a ceremony in itself, often involving rollers, timbers, and a large team of people pushing the vessel into the water.

MODERN TECHNIQUES FOR THE HOME SHIPWRIGHT

Scale Models: A Manageable First Project

If you are new to the craft of **how to make Viking ship** construction, starting with a scale model is highly recommended. Model kits are widely available, but building from scratch offers the deepest learning experience. You can use basswood or balsa for the planking and pine for the mast. The clinker construction technique scales down well, though you will need to use tiny rivets or glued lap joints.

A 1:20 scale model of a Gokstad ship is a classic project. It teaches you all the principles of full-size construction without the need for a workshop full of oak logs. Many museum-quality models are built using the same shell-first method as the originals.

Full-Size Replicas: Community Projects

Many Viking ship replicas around the world are built by museums, historical societies, and enthusiast groups. The Sea Stallion from Glendalough, a replica of a 30-meter longship, was built in Denmark and sailed to Ireland. These projects rely on centuries-old techniques and teams of volunteers.

If you are serious about learning **how to**