

Building Bocage Hedgerows in 25/28mm

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Introduction

Bocage Hedgerows gained infamy in WW2 during the Normandy Invasion as being difficult obstacles to traverse. No WW2 Normandy scenario is complete without an encounter in the bocage country. These hedgerows were created as boundary markers between fields or as windbreaks from the coastal wind, and over time, they grew into substantial barriers. Most originally started as piles of stones dug from the fields or rudimentary stone walls. Over time, soil and plants and even trees were added or grew over these walls, providing bulk and height. The hedgerows of the bocage present a difficult obstacle to bypass, being composed of rocks, soil, and small trees and bushes. The berms can reach heights of up to five feet with an additional 8-10 feet of bushes, shrubs or trees on top. The berms are difficult to penetrate due to the rocky core often anchored by tree or bush roots. To compound the obstacle, most hedgerows run along roads that have sunk over the centuries, in some cases as much as ten feet leading to the outer edge of some hedges to tower 20 feet or more over the road bed.



Photos from US Army Archives

Bocage Hedgerow Composition

To accurately model a bocage hedgerow, it is important to understand the components that make up the hedgerow. The base or berm of the hedgerow is composed of a collection of rocks and soil. The inner core is usually some type of rock or stone pile, either intentionally stacked into a wall or merely tossed to the side of the field by farmers plowing their field. Normally a layer of soil either collects to the side or top of the stones – either blown by the wind or intentionally piled on. A base berm then can then either have the appearance of a pile of stones, a pile of dirt or something in between. In general, older, more developed hedgerows will have more soil on top.

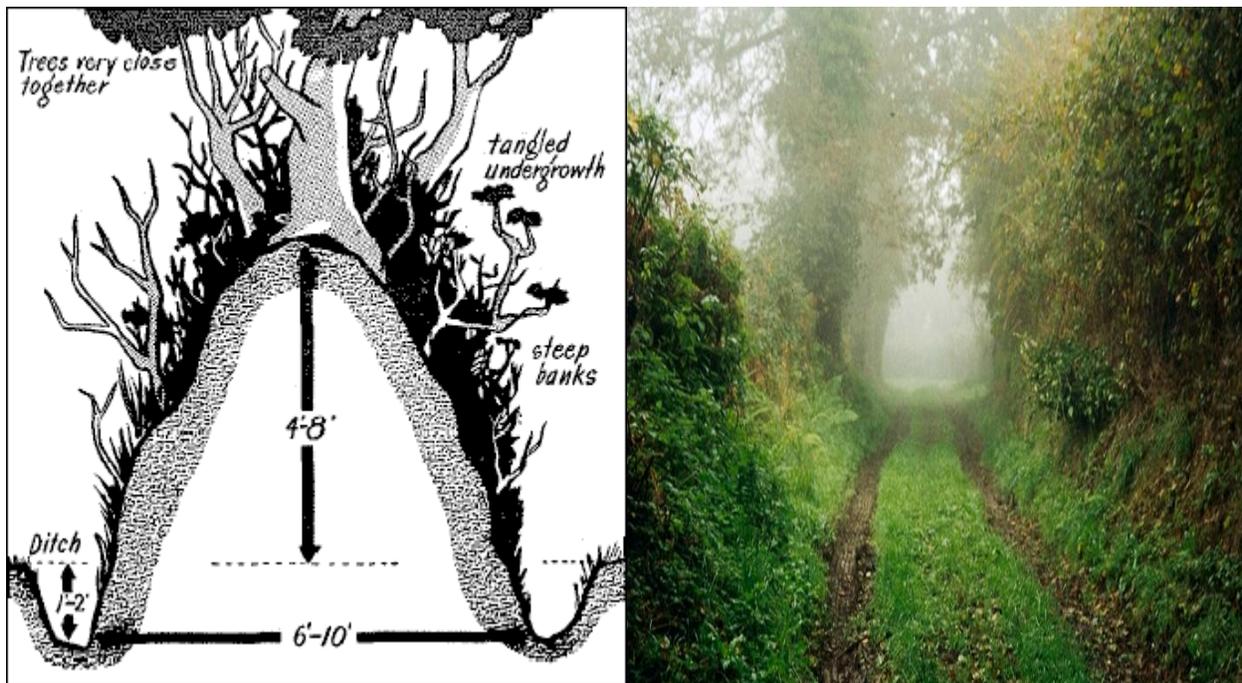


Diagram from Lonesentry.com

Photo from Normandybattlefields.com

On top of the base berm, plants, shrubs, bushes or trees are planted or randomly grow. Standard hedge bushes may reach 3-4 feet in height, while small trees may reach 10 or 15 feet higher. When planted as hedges, the bushes are planted close together and form a dense, solid barrier. Older, more developed hedges will tend to have solid foliage, while newer or more exposed hedgerows may have little or no growth on top.

Constructing the Hedgerow

The base of the hedgerow is made from MDF or hardboard. Strips 3" wide and of various lengths are cut. On top of this are laid foam pieces that will form the berm – normally 1.5 to 2" wide by 1.5" to 2" high strips that run the length of the base and then are whittled down to form steep sided berms (Figure 1, A).

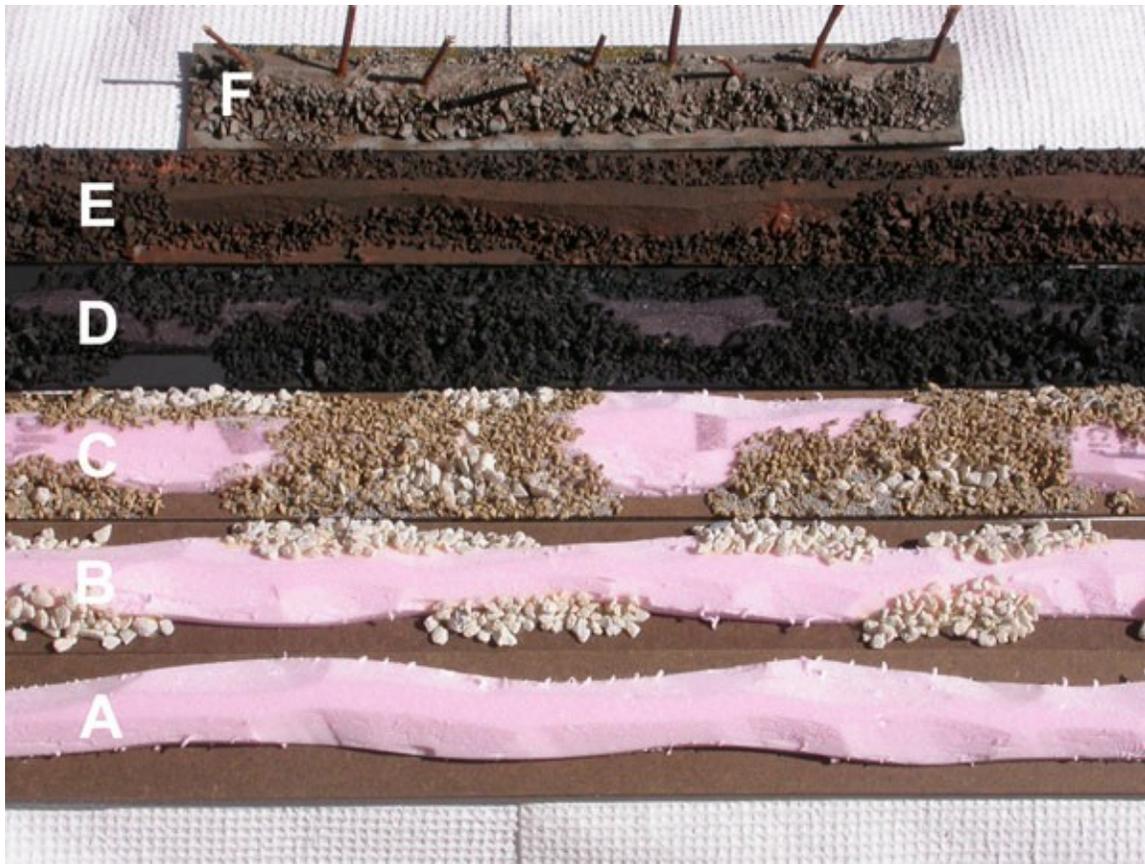


Figure 1 – Various stages of hedgerow construction

Small piles of rock, simulated here with medium sized gravel are glued down in patches down the sides or across the top of the berm. (Figure 1, B). Smaller pieces (railroad ballast, medium (brown) and small (gray)) are used to represent smaller rocks and gravel areas. These are glued around the rock piles as well as their own patches across the berm. (Figure 1, C). After gluing the main foundation details, the base is spray painted black (Figure 1, D) although it may be useful to pre-paint the exposed foam areas with a water-based paint (acrylic or latex) to protect the foam from the spray paint (this was not done here and you can see the slight pink color of the dissolved foam surface). After priming with black, a brown under coat is painted over the entire piece, almost a dry brush technique to leave the crevices and deep spots black. (Figure 1, E). A dry brush coat of gray (mixed slightly with a bit of the brown to help blend the colors) completes the base painting. Small branches and twigs are added to provide the trunks for small trees and structural support for the hedges. (Figure 1, F).

Once the foundations have dried, foliage is added. Lichen is used to create dense hedges while clump foliage of various colors and sizes are added as foliage for trees and small bushes and to add texture to the turf. Finally, patches of turf are added by applying glue to areas surrounding the rock piles and between the bushes and a mix of turf, small bits of foliage and a sprinkling of gray railroad ballast are used to complete the coverage (Figures 2 -4).



Figure 2 – Completed Bocage Hedgerow, side view



Figure 3 – Completed Bocage Hedgerow, angle view



Figure 4 – Completed Bocage Hedgerow, shot against background of real trees

For scale comparison, 28mm American Infantry are shown with completed hedgerows. (Figures 5 & 6)



Figures 5 & 6 – 28mm American GI's advance down a Bocage road

Layout of Hedgerows

In laying out the hedgerows, it is important to remember that they originated as boundary markers to fields, and in general will either follow straight lines that divide fields, or along boundaries; natural boundaries such as streams, hill edges or man-made ones such as roads. A straight hedgerow piece is the general rule, although corners where two hedgerows meet can be of almost any angle. When planning to make a set of hedgerows, many straight pieces combined with various angled corners will probably provide the best selection of natural looking layouts.