

Materials Checklist:

Fabric: _____

Staples: _____

Gravel:

Type: _____

Grade: _____

Amount: _____

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Step-by-Step

An NRCS Guide to Heavy Use Area Installation

What is a Heavy Use Area?

A **Heavy Use Area (HUA)** is an area animals use for feeding, watering, travelling and/or loafing. Over time, these areas become denuded, muddy, eroded and contaminated with animal manure. Animals carry the contaminated soil off in their hooves and it, along with excess nutrients, ends up in the water supply.

Why Should I Fix it and How?

The purpose of installing a heavy use area is to keep sediment and nutrients from washing into creeks and ponds and polluting the water supplies.

Installation includes site preparation, putting down a fabric geotextile sealer, and layering gravel on top of the fabric. This brochure will show you how to do it step-by-step.





Step 1 - Select the Right Site

Locate the HUA where it will not receive runoff. Keeping it dry will help with maintenance. Placement at the top of a slope or rise is preferred. If it must be in an area receiving runoff, install a diversion to re-direct runoff.

The HUA can be square, rectangular or round in shape. To estimate the area needed for an HUA for a watering trough, use the longest dimension for the trough, then add 15' to each side that livestock can access.

Step 2 - Prepare the Site

Remove all mud, manure, soft soil and other debris in the HUA area. The site must be graded down to a hard surface to work right.

While you are grading, install a trench around the edge of the pad so there will be a good place to tie in the fabric to hold it in place.

Step 3 - Install the Fabric

Use geotextile fabric with a tensile strength of 180 lbs, Mullen bursting strength of 320 psi, and a puncture test rating of 80 lbs.

Roll out the fabric. Each piece should overlap the last one by at least 12-18 inches. Leave plenty in the trenches around the edges. Construction equipment should not be allowed directly on fabric during placement.

Step 4 - Anchor Fabric

Anchor the fabric with wire staples to hold it in place as recommended by the fabric manufacturer. Staples are generally needed every 5' within the surface of the fabric and every 3' along any overlaps. Fabric should be overlapped in the toe trenches to provide good anchoring.



Step 5 - Fill in Trench

Backfill in the trenches with soil or gravel to help hold the fabric in place. Then add gravel on the rest of the fabric.

Step 6 - Spread the Gravel

Spread the gravel over the rest of the site. **NOTE: The gravel pad must be at least 6 inches thick.** Drive over the gravel to pack it down to a good solid surface. This will make it easier to maintain.

The gravel type, grade, and thickness may vary due to site conditions. Consult your NRCS Representative for specifications needed in your area.

Step 7 - Install Trough or Feeders

Various types are available. Consult your NRCS Representative or commercial supplier for advice. In most cases, the required waterlines for a trough should be installed prior to the heavy use pad and capped until ready to connect the trough.

Step 8 - Maintenance

Clean the manure off the HUA periodically to keep it working right. Replenish the surface gravel occasionally if settlement or low spots are evident.



For More Information, please contact: