



NATIONAL FIBER
CEL-PAK INSULATION
Professional Cellulose for Cellulose Professionals

Directions for Installing Dense Pack Cellulose behind Insulweb Netting

Equipment and Material Requirements

- *Hanes Insulweb* netting in 8 foot (**90105-8x375**) or 9 foot (**90105-9X375**) widths x 375 foot long
- Air compressor with a minimum of two air lines
- Pneumatic staple gun (**SBS8016AF**) with ½ in. crown by 5/16 in. long staples (**S98005**)
- Installation wand, two inch inside diameter by four foot long aluminum (best, no static **Wall Tube**) or thin wall PVC “central vac” tubing (ok, but some static **PVC-2**) with end cut at a 45 degree angle
- Aluminum insulation roller (**Wall Roller**)
- A minimum of 50 feet of 2 inch blowing hose (**2” Hose**) attached to the larger diameter blowing hose; total length not to exceed 150 feet.
- Optional: Fabric adhesive or slightly thinned *Elmer’s* white glue and two inch paint roller

Preparation

Any cavity taller than twelve feet in height should have cross-bracing or fire stops at mid-height to help support the weight of the material and prevent settling. Do not install cellulose in contact with non-UL rated electrical systems (including non-IC rated recessed lights), knob and tube wiring, or combustion appliance flues, vents or chimneys.

Procedure for Installing Netting in Exterior and Interior Walls Assemblies

1. Measure the length of the wall and add two feet to the measurements.
2. Cut one piece of netting for each wall.
3. Tack the upper corner of the Insulweb in place and pull tight and tack the other side. Repeat this procedure for the two bottom corners, taking care to stretch the material tightly without wrinkles.
4. If stapling, set regulator to 80 psi on the compressor. Staple along the top first, than move to the middle stud and work outwards left and right. Inset (lip stitch) staple ¼ inch on both sides of the wall stud to prevent bulging that could interfere with the drywall installation. Repeat procedure for each stud until the wall is completed. Staples should be no more than 1.5 inches apart.
5. If gluing, tack Insulweb to framing with staples and apply fabric adhesive with a two inch roller through Insulweb to each wall stud and plate. Let glue dry at least two hours before insulating.
6. After two rooms are completely netted, one person can begin blowing material in the first netted room.
7. For sound attenuation, it is easiest to have drywall on one side, netting the other side with Insulweb. Insulweb can be installed on both sides of the wall if after insulating, a sheet of plywood is temporarily held in place and the Insulweb rolled flat on the opposite side of the wall.

Procedure for Installing Cellulose Insulation in Netted Wall Assemblies

1. Poke the end of the two inch installation wand through the center of the Insulweb and insert wand to the bottom of the cavity and pull it back a couple of inches. If there are any obstructions or if the density feels light in any area, the wand will need to be reinserted at different points in the cavity to achieve a uniform density.
2. Using a machine capable of steady blower pressures of 3.5 psi or 80 wci, set the air control to maximum and open the feed gate at approximately 50% to achieve an installed density of 3.5 lbs/cuft.
3. Begin blowing the first cavity; retract the wand when the material stops flowing through the hose. Once the hose end reaches the opening in the netting, reinsert the wand to the top of the cavity and repeat as above until the cavity is completely filled. The netting will tighten and bulge slightly as the hose is withdrawn. Using the coverage chart below or National Fiber's Expanded Bag Coverage Chart, confirm bag count per square foot of wall area.

Framing Size	R-Value	Cavity Depth (Inches)	Coverage per Bag (Net SqFt)
2 x 4	13	3.5	24.5
2 x 6	20	5.5	15.1
2 x 8	27	7.5	10.7
2 x 10	35	9.5	8.1
2 x 12	42	11.5	6.5
2 x 14	49	13.5	5.3
2 x 16	57	15.5	4.5

4. After blowing, check the density by depressing the Insulweb with your hand. A properly filled cavity will have the feel of a firm mattress. If voids are observed, or any portion feels soft to the touch, reinsert tube and add more material.
5. Any of the cavities having bulges will need to be rolled along the middle of each assembly with the insulation roller so that they do not interfere with the installation of the drywall.
6. Cross-bracing can create two separate cavities; blow each cavity with separate entry holes.
7. For overhead applications where the Insulweb will be left exposed, install wood furring or strapping perpendicular to the rafters or joists 24 inches on center before dense packing. This will provide additional support and durability in areas not covered with drywall.

For further information, please contact our Technical Manager, Bill Hulstrunk at technical@nationalfiber.com

Note: Bracketed bold italicized items are the National Fiber part numbers used for ordering

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