Eljen Septic System Installs

Eljen septic system installs refer to installing a specific *type of advanced septic drainfield system* manufactured by **Eljen Corporation** — an alternative to traditional stone-and-pipe septic leach fields that's especially useful on challenging sites or where space is limited.

What Is an Eljen Septic System?

An **Eljen septic system** uses **Eljen GSF (Geotextile Sand Filter) modules** in the Effluent Disposal area portion of a septic system. Instead of conventional gravel or aggregate trenches, Eljen modules are lightweight, prefabricated units made of **geotextile fabric with a plastic core** that enhances effluent treatment and soil acceptance rates.

Here's how it works:

- Wastewater flows from the septic tank into perforated distribution pipes above the Eljen modules.
- The modules provide **aerobic treatment** and a larger surface area for bacterial action before effluent enters specified sand and the native soil.
- This improves overall treatment quality and allows for a **smaller Effluent Disposal area footprint** than many conventional systems.

Benefits of Eljen Systems

- **Smaller system footprint** than conventional systems in many cases.
- **Better effluent treatment** before it reaches soil.
- Handles **challenging site conditions** (tight lots, shallow soils).
- **Lightweight and easier to install** than heavy aggregate trenches.

Things to Consider

- They must be installed by qualified installers following local health regulations.
- System performance heavily depends on correct design and soil conditions.
- Like all septic systems, periodic maintenance (e.g., pumping the septic tank) is essential.

NORTHERN HOME & EXCAVATION LLC
3 Front Street, (PO Box 161),
Rollinsford, NH 03869
off/ cell: #(207) 517-0800 (call/ text)
email: Dana@Northern-Excavation.com
website: www.Northern-Excavation.com

Pictures of our install at 29 Carriage Hill Road, South Berwick, ME

1. **Site evaluation and permit/design**— Soil characteristics, lot constraints, and local codes dictate how the system is laid out.

Site Evaluation: What It Is & Why It's Needed?
A **site evaluation** is the **first step** in planning a septic system — including Eljen systems — and it's required before any permit is issued.

What Evaluators Look For
A qualified evaluator (soil scientist, engineer, or certified site evaluator) will:

- **Dig test pits or soil borings** to examine soil texture, structure, color, and drainage characteristics.
- **Identify depth to restrictive layers** such as bedrock, seasonal high groundwater, hardpan, or other layers that limit absorption.
- **Assess soil acceptance and percolation** to determine how quickly and effectively soil can disperse treated effluent.
- **Check site features** like slopes, drainage patterns, proximity to wells, water bodies, structures, and setbacks to property lines.

Why This Matters
*The soil and site conditions dictate **whether the location is suitable** for any septic system and what type — conventional, mound, or an advanced system like Eljen GSF — is appropriate. If the soils or site conditions are challenging, an advanced technology such as Eljen's sand filter may be the most viable solution, but the evaluation must demonstrate soil can accept effluent after the additional treatment.*

2. **Excavation** — Trenches or beds are dug to required depth.
Excavation is where the approved design gets translated into the ground. For Eljen systems, **precision matters** more than brute digging

Leveling the EDA (Effluent Disposal area)

NORTHERN HOME & EXCAVATION LLC
3 Front Street, (PO Box 161),
Rollinsford, NH 03869
off/ cell: #(207) 517-0800 (call/ text)
email: Dana@Northern-Excavation.com
website: www.Northern-Excavation.com

3. **Sand and module placement** — A layer of specified ASTM C33 sand is placed first, then Eljen GSF modules are laid in rows with perforated pipes on top.

Prep for EDA (Effluent Disposal area)

- Scarify Soil (receiving layer)
- Install Septic sand (C-33)- Correct elevation & depth
- User laser level too level EDA (exactly to the correct elevation)

Setting & back filling tank (compacting as you go)

- Install Gravel or Crushed stone (<3”), level & compact Correct elevation & depth
- User laser level too level EDA (exactly to the correct elevation)

NORTHERN HOME & EXCAVATION LLC
3 Front Street, (PO Box 161),
Rollinsford, NH 03869
off/ cell: #(207) 517-0800 (call/ text)
email: Dana@Northern-Excavation.com
website: www.Northern-Excavation.com

4. **Fabric and sand cover —**
   - Install Pipe & Eljen system on EDA
   - Geotextile fabric and more sand protect and complete the EDA (Effluent Disposal area).

5. **Inspection and backfill —** The system is inspected and backfilled before final landscaping
   - Back fill with correct material to Correct elevation

Note: Installers must be **trained and certified** by Eljen or authorized distributors because proper installation techniques are critical to system performance.

Eljen Geotextile Sand Filter (GSF)

Certificate of Training

GSF

is presented to:

Dana Kiklis

Attended Eljen Corporation's **2.0 Hour** GSF Design and Installation training, covering an overview of design and installation principles.

Certified: August 28, 2020

Eric Daniels, Eljen Technical Representative

eljen CORPORATION

Innovative Environmental Products and Solutions Since 1970

NORTHERN HOME & EXCAVATION LLC
3 Front Street, (PO Box 161),
Rollinsford, NH 03869
off/ cell: #(207) 517-0800 (call/ text)
email: Dana@Northern-Excavation.com
website: www.Northern-Excavation.com