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The Importance of Flexibility for Geomembrane Installers

Musculoskeletal Injuries (MSIs,) or soft-tissue injuries, are the most common type of non-fatal injury in the geomembrane industry. These injuries affect muscles, tendons, ligaments, nerves, and spinal discs, typically caused by overexertion, repetitive motions, and awkward postures.

Installing geomembrane liners is demanding, physical work. Tasks such as lifting, pulling, and bending throughout a shift can place significant strain on the body, increasing the risk of MSIs. This risk increases when combined with the need to frequently walk up and down slopes. Warming up muscles before working and maintaining good flexibility are key components in reducing these risks and preventing workplace injuries.

While regular safety toolbox meetings are essential, IAGI also encourages crews to incorporate basic stretching and flexibility exercises before the start of every shift. These routines help prepare the body for the physical demands of geomembrane installation.



Comanco USA crew performing morning stretching exercises

Why Stretching Programs Matter:

Stretching programs involve implementing a structured, daily routine that warms up muscles, increases joint flexibility, and boosts circulation before engaging in heavy lifting, bending, or repetitive tasks. An effective program reduces muscle tension and fatigue, which are primary causes of sprains and strains on site, by:

- 1. Improving Flexibility and Range of Motion** – Helps the body move more efficiently during demanding tasks.
- 2. Enhancing Physical Preparedness** – Acts as a warm-up, increasing blood flow and reducing stiffness.

3. **Protecting Joints and Connective Tissue** – Reduces the likelihood of strains and overexertion injuries.
4. **Supporting Muscle Recovery** – Improves circulation and helps the body rebound more quickly after repetitive physical activity.

For geosynthetic installers, the International Association of Geosynthetic Installers (**IAGI**) emphasizes three foundational principles: **Safety, Quality, and Productivity**. All three are equally important to support a sustainable and successful business.



Layfield Canada crew performing morning stretching and flexibility exercises