



What are PAILs/RAILs?

Introduction:

PAILs & RAILs are a methodology for utilizing isometric training in conjunction with stretching techniques to both increase & strengthen progressively larger ranges of active, useful motion.

PAILs stands for: ***Progressive Angular Isometric Loading.***

RAILs stands for: ***Regressive Angular Isometric Loading.***

General Cues: (*Video example with shortened durations for demonstrative purposes*)

- a.) Utilize an external resistance to prompt an isometric initial action (PAIL)
- b.) Hold that position, 60-80% effort for about 2+ minutes
- c.) Then concentrically against the air press in the opposing direction for about 30 sec or so (80-100% effort, RAIL)

[Supine Ext Rotation PAILs / RAILs - YouTube](#)

Ex. 2 min PAIL Supine Internal Rotation Isometric (60-80% effort) followed by 30 sec RAIL External Rotation Concentric (80-100% effort)

Where do you place these in your Functional Range Conditioning routine?

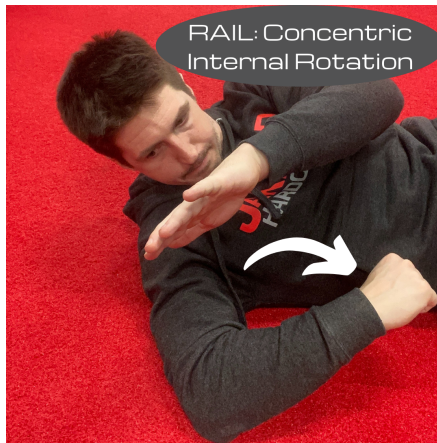
As we build up your mobility through various range of motion drills, CARs and other targeted drills to the joints, we need to build strength in those specific ranges of motion. Ranges of motion where you are “mobile” but weak are hot zones for injury.

What are some of the benefits for PAILs/RAILs in the rehab/strengthening process?

- * Induce fibroblast activity to promote new protein production & tissue growth
- * Lay down new collagen fibers along lines of stress to produce more durability
- * Prevent post-injury neuromuscular inhibition (neurological apprehension to using a muscle)
- * Maintain/increase muscular strength and function
- * Initiates progressive adaptation through progressive load-bearing in the tissues

Daily Practice: PAILs/RAILs Examples for the Shoulder:

1.) Side Lying Sleeper Stretch (2min PAIL, 20-30s RAIL)



2.) Banded Americana Stretch (2min PAIL, 20-30s RAIL)



3.) Scap Retraction PAILs RAILs (2 min PAIL, 20-30s RAIL)

