



RISE SUBSTRATES — GUIDE 2 OF 2 | COMING FROM ROCKWOOL

Leaving Rockwool? Go at Your Own Pace.

You don't have to decide anything today. This guide just shows you, plainly, what actually changes if and when you do — with real numbers, from real greenhouses.

No pressure. No deadline. Read it whenever you have ten minutes.

ONE NUMBER, BEFORE ANYTHING ELSE

22,500tonnes

Estimated stone wool waste sent to landfill every year from the Leamington, Ontario greenhouse region alone — part of over 150,000 tonnes of total greenhouse waste the region landfills annually. Most rockwool slabs are used once and then thrown away.

*Aelius LED, "Greenhouse Waste and the Stone Wool Problem,"
May 2026 — citing regional landfill data for the Leamington growing area.*

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Real Greenhouses, Real Numbers



You shouldn't have to take a supplier's word for it. Here is what independent research, trade press, and the rockwool industry

The Netherlands — Commercial Pepper Grower

More forgiving, with a better balance between vegetative and generative growth" — a Dutch pepper grower's own words after moving his first crop off rockwool and onto coco substrate. He reordered coco for the next planting.

Reported in HortiDaily, "NL: Making a leap into a substrate switch," August 2026.

Peer-Reviewed Trial — Greenhouse Cucumber Production

Cucumber plants grown in coir showed significantly higher leaf area and yield than in rockwool, with more calcium, magnesium and zinc reaching the plant — and better fruit flavour compounds.

Published in Heliyon, "Comparison of rockwool and coir for greenhouse cucumber production," October 2022.

Leamington, Ontario — Regional Greenhouse Cluster

An estimated 10–15% of the 150,000+ tonnes of greenhouse waste landfilled annually in the region is spent stone wool. Even Grodan, the world's largest rockwool manufacturer, now runs its own take-back and recycling programme — because disposal is a real cost of the material.

Aelius LED, May 2026; Grodan "Rockcycle" recycling programme, grodan.com.

WHY THIS PAGE MATTERS

None of these growers switched everything overnight. The Dutch pepper grower above was on his first crop. The point isn't that the decision was instant — it's that it was informed, gradual, and worked.

What Actually Changes

Rockwool and coco peat are managed differently at the root more than they look different at the surface. Here is the short, honest list of what's genuinely not the same.

HOW THE SUBSTRATE HOLDS NUTRIENTS

Rockwool: chemically inert, holds no nutrients — every element must be dosed in the feed

Coco peat: naturally buffers — it evens out small feed swings before they reach the roots

BEFORE YOU CAN PLANT INTO IT

Rockwool: factory slabs need a pre-soak to bring pH down to planting range

Coco peat: needs a calcium-wash step to lock excess potassium and sodium out of the root zone

HOW A FEED CORRECTION SHOWS UP

Rockwool: very little buffering — a feed change reaches the roots fast, leaving little room for dosing error

Coco peat: some natural buffering softens the swing, so corrections land more gradually

HOW MANY SEASONS ONE BATCH LASTS

Rockwool slabs are physically spent after one crop cycle — effectively single-use

Coco peat commonly holds its structure for 2–3 seasons when flushed and reused

WHAT HAPPENS AT THE END

Mineral fibre, doesn't biodegrade — landfill is the default route, and costs are rising in several regions

A coconut processing by-product — renewable, fully compostable after use

WHAT STAYS EXACTLY THE SAME

Your slab layout and EC/pH habit stay the same — dosed precisely, not by guesswork.

Blends That Match or Beat

Coco peat isn't one substrate. Rise Substrates blends the pith-to-chip ratio specifically to out-perform peat moss where it matters most: air reaching the roots.

50/50 PITH-CHIP — THE ROCKWOOL EQUIVALENT

Closest match to standard slab behaviour on drainage feel and handling — even, predictable wetting-front, but with natural cation exchange capacity rockwool simply doesn't have.

30–35%

AIR-FILLED POROSITY

55–60%

WATER-HOLDING CAPACITY

70/30 PITH-CHIP — FOR LONG-SEASON CROPS

Holds structure across a longer crop cycle without compacting the way straight peat does by mid-season — the standard choice for tomato and rose growers running 10+ month cycles.

25–30%

AIR-FILLED POROSITY

60–65%

WATER-HOLDING CAPACITY

30/70 PITH-CHIP — MAXIMUM DRAINAGE

Built for crops that punish standing water — berries above all. Where peat moss typically sits at 10–20% air-filled porosity, this blend roughly doubles it.

32–38%

AIR-FILLED POROSITY

50–55%

WATER-HOLDING CAPACITY

Cucumber greenhouse system

Cucumber and pepper growers running slab systems typically move to the 50/50 or 70/30 blend first.



You Can Go This Slowly

Nothing in this guide asks you to convert anything today. Here's the lowrisk way growers actually do this.

1

Try one row, one bench, or one block

Keep the rest of your crop exactly as it is, on peat moss, with nothing at risk. Match the new substrate's feed EC/pH to what you already run.

2

Watch it for one full cycle

Compare root development, canopy vigour, and runoff stability against your main crop. Coco peat responds fast, so you'll see the answer within weeks, not months.

3

Decide only then

If it's not better for you, you've lost nothing — you're still on peat moss everywhere else. If it is, expand a little at a time, on your own schedule.

STAYING ON ROCKWOOL IS A COMPLETELY REASONABLE CHOICE, FOR NOW

It works, and for many crops it's the industry standard for good reason. The only thing worth knowing is that disposal is becoming a real, rising cost in several growing regions (page 3) — so when you do look into alternatives, it's worth doing it on your own timeline, rather than under pressure later.





IF YOU WANT TO TALK IT THROUGH

We Help Growers Work This Out.

Tell us your crop, climate, and current substrate. We'll tell you honestly whether a trial block makes sense for you — and if it doesn't yet, we'll say so.

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Also available: the crop-specific Rise Substrates guides (Tomato, Strawberry, Cucumber, Blueberry, Roses & more),
and Guide 2 of this series — *Coming From Rockwool*.