The ideal infield skin has the following characteristics:

- **Good traction**
  - No material movement, cleat in cleat out
- **Resilient**
- **Consistent**
  - Holds up under extreme weather events
  - Groundskeepers, coaches, players know what to expect
- **Drainage**
  - No standing water, no rainouts
- **Contrast**
- **SAFE**
  - No bad hops!

A ballfield's integrity depends on the quality of its basic soil makeup.
THE RIGHT FOUNDATION

**Infield Profile**

- **Top Dressing**
  - Shale/Calcine

- **Infield Mix** –
  - 4” depth
  - Engineered Soil

- **Sub Base**
  - Typically 4” - 6” deep
  - Combination of sand and gravel
  - Sub base graded to mirror finished grade
Target content of a high performing infield mix:

1. The overall sand content should be between 60-75%, with at least 50% of the sand particles in the medium – coarse range.
2. The clay content needs to be higher than the silt content.
3. Not all clay is alike. Having clay that helps manage moisture only improves the overall performance of the infield mix.
Typical Infield Skin Symptoms:
• Silty mixes are slimy when wet and very dusty when dry
• Sandy/coarse mixes are loose & unstable
• Ag lime can be abrasive, sharp & hard

Engineered Infield Mixes Create Predictable Outcomes:
• Assures proper balance of sand, silt, and clay to absorb moisture and play more games
• Enables your infield to play down and firm to enhance safety for the player – “cork board” feel
• Creates consistent mix from year to year and location to location throughout the country
Surface Grade of ½% to 1% Slope

Facilitates a rapid removal of water from the playing surface when the grade is properly constructed and maintained.

- It's a misnomer that infields drain vertically and need a drainage system underneath the infield skin—*not necessary*.
- Best way to create drainage is to have a proper finished grade
- Maintain a level of moisture
Calcines vs Shales

**Calcined Clays**
- Fired at 1500 degrees in rotary kiln, lots of pore space
- Pores create the ability to absorb water during wet conditions
- Ideal to maintain problem areas during the spring season

**Expanded Shales or “Vits”**
- Fired over 2000 degrees, less pore space
- Less absorbent to help infield skin retain moisture
- Durability resists particle breakdown
- Color-fast nature provides excellent contrast for tracking ball movement
NO TILLING OR AMENDING SKINNED AREAS

- Tilling or amending any rootzone for any plant is beneficial
  - Decreased compaction by increasing pore space
  - Promotes vertical drainage
- For skin surfaces we want to be clear to use product on top surface not till or amend
- Tilling into skin will compromise integrity of any infield
  - Creates pore space
  - Dries out quicker
  - Decreased stability

Applications

- Never use Topdressing to fill in low areas or bring an infield skin to grade
- Consider 1 ton per 3,000 – 4,000 square feet
- Softball usually uses more than baseball – softer surface
- Seasons dictate which type to use more/less of
- Topdressings and mound clays are yearly budget items. Infield mix should not be if Engineered Soils.
- Stay clear of Drying Agents that are too fine
Packaging Clay

CLAY BRICKS & PACKING CLAY
Packing Clay

- Clay Bricks/Blocks
  - Easy to install
  - Hold up the longest
  - Can be a hazard if not maintained properly

- Shredded Clay
  - 50# bags
  - Use in conjunction w/ bricks or by itself
  - Used to maintain “surface”
  - Several types of clay
    - Recreational to Professional

- What if I can’t maintain these areas like I should? What is the alternative?

- Consider using tarps if possible

Warning Tracks

WARNING TRACKS
What do warning tracks provide?
- Safety
  - Warns players that the fence is close
- Easier to maintain than fighting weeds/grass from growing along the fence (extend 6" beyond fence)
- Drainage
  - Installed properly will provide optimum vertical drainage to reduce/eliminate puddles
- Aesthetics
  - Rich contrast in color that won’t stain or fade
  - Can get creative in front of dugouts and backstops
Do’s & Don’ts

Very important to invest in capable tools and equipment, but let’s first discuss a few maintenance tips:

▪ Vary dragging patterns to prevent lips and bowls
▪ Hand rake edges
▪ Do not rake across baselines – rake lengthwise
▪ Keep edges clean
▪ Repair mound and home plate areas after each game
▪ Stay patient in early spring, keep off if too wet
▪ Sun and wind are your best friends during this time

ABI – Infield Rascal
Proper Maintenance

Maintenance is a **PROCESS**, not an **EVENT**.

- Takes time and should be scheduled on a regular basis
- It is always best to stay a season ahead
  - This includes planning & allowing for specific times to perform repairs and renovations
- In cooler regions, it is best to do the bulk of the repair & renovation work in the fall.
- Putting the field to “bed” in game condition prior to winter is highly recommended

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Proper Maintenance

**When to start working on the Infield Skin**

- Evaluate playability and safety of the infield
- Many conditions have an effect on the playing surface during the season as well as the off-season
  - Freeze/thaw effect of winter
  - Windy rain of spring
  - Heat of the summer
  - Weeds beginning to grow
  - Edges become uneven
  - Topdressing materials migrate
  - Soil particles of the infield mix separate
Proper Maintenance

When to start working on the **Infield Skin**

- Is the field too wet?
  - Make sure all of the frost is out of the ground post winter
  - Do not try to work the surface or drive equipment on the infield if you are leaving deep foot prints or material is sticking to your shoes
  - Remove standing water with proper techniques

**BE PATIENT OR THINGS WILL GET WORSE THAN THEY ARE**

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Proper Maintenance

**Infield Skin Surface Maintenance**

- Grooming
- Rolling
- Edges & baselines
- Adding new infield mix
- Renovations & grading
- Moisture management
- Repairs to wear areas: mound, batter’s boxes, lead-off spots and sliding pits
PROTECTING THE INVESTMENT – LONG TERM
How to maintain a Safe & Playable surface

LONG TERM

- Maintenance Contracts
  - Multi-year agreements that will flat-line budgets
  - Can include all necessary materials needed
  - Takes away the task of trying to decide what is
  - going to be needed each year
  - Include a re-grade of the infield skin as needed
    based on number of events and size of infield

IT IS NOT NECESSARY TO TURN TO ARTIFICIAL TURF IN ORDER TO HAVE A SAFE & PLAYABLE FIELD

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