



CTL LEATHER

A Garrett Leather Company

Ponding Explained  
(AKA Puddling)



# HOW TO PREVENT WRINKLES ON LEATHER SEATS (AKA PUDDLING OR PONDING)

This phenomenon is expected and does not indicate a defect in the leather and tends to be more of a construction and fit issue than a leather one. Once it occurs, it tends to be done and does not get worse over time as a general rule.

If puddling is a concern, it is always best to speak with your designer or upholsterer ahead of time, before the furniture is made. The best way to prevent puddling is to use a firm, sturdy foam with springs in a design that pulls the leather taught over the filling in order to provide sufficient support. The amount of puddling that occurs is mostly determined by the manner in which the furniture is upholstered and not by the [type of leather](#) that is used.







While all leathers will stretch, the amount of stretch is related to the amount of compression. Factors that contribute to the amount of puddling are the size of the leather panel (large panels vs. smaller segmented panels), the density of the foam, type of suspension (webbing/no sag springs), and the amount of weight placed on the seat. Additionally, each hide is different, so it's not uncommon to have different seats react differently as they are not from the same animal. It really is a fine balance of comfort, appearance, softness and durability.

Most furniture will puddle in the seats with use, but it's what's in the core that will dictate how much puddle you get. Regular (low density) foam rubber and down will puddle the most. To prevent puddling, high density foam is better, though the best cushion core options are called a spring loft or spring fiber. These cushions not only have foam, but they also have springs in the seat core itself. These work very much like a mattress would. Once you get up, they will spring back to retain the

original shape, not allowing a puddle to be created.

Some folks call puddling comfort wrinkles and yes, they will develop over time if you buy a softer seat core or cushion and a really soft leather. A good informed upholsterer or manufacturer can help you with the right seat cushion for you if you mention your concern. You can always expect this to happen when the seat core is too soft or when down is used. Not all leather furniture will show puddling. It's all in the seat cushion core and the leather you select.

Another solution that may help for high traffic situations, is to sew the leather to a non-stretch fabric first before upholstery to help limit the amount of stretch, but that really is down to the individual manufacturer's knowledge & know-how. Some other manufacturers have used "air holes" or a "mesh" to help allow air to escape, but again, down to their specific construction processes and know-how.



# UNDERSTANDING PONDING IN LEATHER

## PONDING IN LEATHER UPHOLSTERY

*(Also known as puddling or stretching)*

**Ponding** refers to the **visual depressions or stretched areas** that form on leather upholstery, particularly in **seating areas after use**.

It's most common with **soft, natural, or leathers**, and it's **not a defect** — it's a characteristic of quality leather reacting naturally to pressure and use.

## WHY PONDING HAPPENS

- **Leather is a natural, breathable material** — it stretches and softens with use.
- **Cushions compress** under weight, but leather doesn't fully rebound the way synthetics or vinyl

might.

- On **wax pull-up** or **aniline leathers**, this effect can appear more pronounced due to the supple, untreated nature of the leather, causing areas to lighten or patina.

## IS PONDING BAD?

No — in fact:

- It's a sign of **authentic, high-quality leather** doing what it's designed to do.
- Many designers and leather lovers embrace the look as patina — a lived-in, elegant softness that gives character.
- It often **levels out over time** as the leather adjusts and wears in.







#### HOW TO MINIMIZE OR MANAGE PONDING

- Use **high-resiliency foam** or **fiber-wrap cushions** to help maintain shape.
- **Rotate cushions** periodically to distribute wear evenly.
- Occasionally **smooth or fluff** the leather by hand.
- **Tight upholstery techniques** during production can help reduce long-term ponding.
- For wax pull-up leather, **reconditioning** and light heat (warm hand rubbing) can help visually reduce minor ponding marks.

#### TALKING POINT FOR CLIENTS

“Ponding is the leather’s way of adapting to your comfort. It shows authenticity, softness, and natural aging — not synthetic perfection.

Like a great pair of shoes or jeans, it gets better with time.”



# UNDERSTANDING PONDING ; A PERFORMANCE MATTER ROOTED IN CONSTRUCTION, NOT THE LEATHER

If ponding is happening **too early or excessively**, it typically points to **construction and internal materials** — not just the leather itself.

Here's an updated explanation that still educates without blaming leather — and positions you as a knowledgeable, high-quality supplier:

## WHAT IS PONDING?

Ponding refers to the **visible depressions, dips, or sagging** that appear on seat cushions — especially in leather upholstery — after use. It's often mistaken as a leather defect, but in reality **ponding is typically a result of suboptimal internal construction**.

## THE REAL CAUSE: WHAT'S BENEATH THE LEATHER

Ponding is rarely about the leather itself. It's more about what's underneath:

- **Low-resiliency foam** that doesn't bounce back
- **Inadequate cushion fill** or poor layering (e.g., no fiber wrap or down-proof ticking)
- **Inconsistent tensioning** during upholstery
- **Overly soft or unstructured cores** used to cut costs

When the “guts” of the furniture — the foam, fill, support layers — aren't properly engineered for leather, **the surface can't maintain its shape**, leading to visible sagging or stretching.

## LEATHER'S ROLE

Premium leathers like **wax pull-up, aniline**, or **full-grain** are naturally soft, supple, and breathable. They **show movement** more than coated or synthetic materials.

But: **Leather will mirror what's beneath it**. If the structure is weak, it will show it.

## HOW TO AVOID PONDING (DESIGNER & MANUFACTURER TIPS)

- Use **high-resilience (HR) foam or multi-layered core systems**
- Add a **fiber wrap** or down-proof ticking for volume and recovery

- Design cushions with **proper pitch, crown, and tension**
- Avoid relying on soft leather alone to “carry” the seat form

## TALKING POINT FOR CLIENTS

“Ponding is not a flaw in the leather — it's often a sign that the cushion construction underneath isn't doing its job.

When the right fill materials are used, premium leathers can wear beautifully and maintain their shape over time.”

