

Re: Dummies question – gap filler

Source: <http://sci.tech–archive.net/Archive/sci.space.shuttle/2005–08/msg01410.html>

- *From:* "Reunite Gondwanaland (Mary Shafer)" <reunite.gondwana@xxxxxxxxxx>
 - *Date:* Sun, 07 Aug 2005 23:19:34 –0700
-

On Thu, 4 Aug 2005 09:25:51 –0500, Herb Schaltegger
<herb.schaltegger@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote:

> That's utterly incorrect. The gap fillers in question have two
> purposes. One of them is to prevent "chatter" of the tiles due to
> launch vibration and acoustics. Such chattering can lead to tile
> cracks. A second purpose (applicable to only one of the two that came
> loose) is to literally fill a gap between two tiles which are installed
> slightly too far apart due to tolerancing issues – e.g., one or both
> adjacent tiles is a shade too narrow leaving an out–of–spec gap between
> the two. Removed, it leaves a bigger–than–specified gap; however,
> the heat transfer analysis demonstrates that it will not result in
> dangerous over–heating below these particular tiles.

This is part of the reason the tiles are laid diagonally, not
straight. The flow always crosses the gap, rather than running along
it. This minimizes local heating at larger–than–normal gaps.

Mary

—

Mary Shafer Retired aerospace research engineer
We didn't just do weird stuff at Dryden, we wrote reports about it.
reunite.gondwana@xxxxxxxxxx or miliff@xxxxxxxxxx

- *Follow–Ups:*
 - ◆ **[Re: Dummies question – gap filler](#)**
◇ *From:* Greg D. Moore \((Strider\)
- *References:*
 - ◆ **[Dummies question – gap filler](#)**
◇ *From:* John Smith
 - ◆ **[Re: Dummies question – gap filler](#)**
◇ *From:* John A. Weeks III
 - ◆ **[Re: Dummies question – gap filler](#)**
◇ *From:* John Smith

Re: Dummies question – gap filler

◆ **Re: Dummies question – gap filler**

◇ From: Herb Schaltegger

- Prev by Date: **Re: Blanket lossening, how?**
- Next by Date: **Re: What are noises we can hear during EVA?**
- Previous by thread: **Re: Dummies question – gap filler**
- Next by thread: **Re: Dummies question – gap filler**
- Index(es):
 - ◆ **Date**
 - ◆ **Thread**