

A Diaper Home for G-Force

By Mindy Thomas

The Pop ups. Stay seated. Three, two, one, ignition. Get ready for an adventure of magnificent proportion.

The Pop ups. (Singing.) I don't know what you've been told, but we're in a golden age - so many discoveries that are jumping off the page. Wow in the world. Wow in the world. Wow in the world. Wow in the world. Wow in the world. Wow in the world. Wow in the world. Wow in the world.

The Pop ups. With Guy and Mindy. We're on our way, Houston.

<<Scene opens on a sunny day in the neighborhood – Guy Raz is walking down the sidewalk and humming happily to himself>>

Guy. Doo doo doo, ba-ba-doo-dee doo doo...

Ctt. <<Suddenly, in a background, we hear Gramma G-Force fighting with her cat>>

<<Loud meow>>

Gramma G-Force. <<Distance>> Hey! Quit throwin' my stuff out the window, Colonel Toots Thunderpaw!

<<Throwing stuff out the window and hissing>>

Guy. What in the...

Gramma G-Force. <<Distance>> What?! Yer kickin' me outta my own house?!

Ctt. <<Throwing stuff out the window and hissing>>

Guy. Uhhh...

Gramma G-Force. <<Distance>> well I knew I shoulda never let you be my landlord annnnd my roommate!

Ctt. <<Throwing stuff out the window and hissing>>

Gramma G-Force. [Distance] come on, wagon. We'll go live with Mindy.<<Gramma G-Force starts to roll the wagon down the block while muttering to herself>>

Guy. <<Walking up to Gramma G-Force>> Hey uh...Gramma G-Force! Is everything okay?

Gramma G-Force. What.

Guy. Well, it's just that I heard you yelling at your cat down there and....

Gramma G-Force. Colonel Toots Thunderpaw is my *landlord*.

Guy. Oh right...your landlord...that means that he...*owns the house*?

Gramma G-Force. Yeah...

Mindy. Hey Guy Raz! Hey Gramma G-Force!

Reggie. Coo

Guy & Gramma G-Force. Hey Mindy

Gramma G-Force. Hey pigeon.

Mindy. What's going on over here? Why you got all of your stuff in this little red wagon?

Reggie. Coo

Guy. That's what i'm trying to figure out.

Gramma G-Force.

Dennis. [Walking up] Hey Guy! Hey Mindy! HI reggie! Hey granny g!

Mindy/Guy. Hey Dennis

Reggie. Coo

Gramma G-Force. Hello boy.

Dennis. What's going on at your house, Gramma G-Force?

Gramma G-Force. I don't know. I don't live there no more. I guess I just live in this wagon now. <<Kicks wagon>>

Dennis. Oh that makes sense.

Guy. It does?

Dennis. Yeah, I just walked past your house and Colonel Toots Thunderpaw is turning it into a baby farm.

Mindy and Guy. A what!?

Dennis. A baby farm! An indoor/outdoor farm for babies to spend the day!

Mindy. Uh

Guy. You mean a...daycare center, Dennis?

Dennis. Yeah! That's what I said! A baby farm! Look! You can see the babies piling in from here!

<<Sounds of babies>>

Guy. Oh wow.

Reggie. Coo

Mindy. That's a lotta babies.

Gramma G-Force.

Fingerling. <<Walking up>> well, you really did it this time, G-Force!

Guy. Oh hey Thomas Fingerling

Dennis. HI Tommy!

Mindy. Thomas Fingerling!

Gramma G-Force. Not now Fingerling...

Fingerling. If I were that cat i'd a kicked you out a long time ago!

Mindy. <<Gasp>> Thomas Fingerling!

Reggie. Coo

Gramma G-Force. Them babies don't even need a house. They're living in their luxury diapers!

Reggie. Coo

Gramma G-Force. Is that what you want, Colonel Toots Thunderpaw! Me livin' in a diaper?!

Guy. Ew

Reggie. Coo

Mindy. Wait!

Everyone but Mindy. What??

Mindy. That's it!

Everyone but Mindy. Huh??

Fingerling. Spit it out!

Reggie. Coo

Mindy. What you just said Gramma G-Force! It gave me an idea for your housing crisis situation.

Gramma G-Force. Ohh..

Guy. Go on, Mindy...

Mindy. What if we all teamed up to build Gramma G-Force a house made out of diapers!

Reggie. Coo

Guy. Mindy! That's ridiculous.

Mindy. It's not ridiculous, Guy Raz! It's science!

Gramma G-Force. Nooooooooo.

Mindy. No, really! Hear me out! I just read a new scientific study about diaper houses in the journal, science reports! This is serious science business everyone!

Reggie. Coo

Guy. Wait wait wait wait, everyone! Mindy, was this the study that was conducted by that team of engineers from japan's university of kitakyushu?

Mindy. That's the one, Guy Raz!

Guy. The one that led to the building of a sustainable house made out of diapers?!

Mindy. You know it!

Reggie. Coo

Guy. Yeah, I remember reading something about this. These engineers in this study, had a hypothesis or an educated guess that dirty diapers, which are usually made out of some combination of wood pulp, cotton, absorption materials, and synthetic or human made fibers, could be used in place of sand in the creation of concrete.

Mindy. And concrete is that hard gray material that's used to build things like sidewalks and buildings... like homes.

Reggie. Coo

Guy. But...one of the key ingredients in creating concrete is actually pretty expensive *and* in worldwide shortage right now.

Dennis. <<Gasp>> A rare key ingredient?! What is it Guy Raz?

Guy. This key ingredient is...sand!

Dennis. ...Huh...the world is running out of sand?!

Mindy. Actually Dennis, sand is the second most used natural resource in the whole world behind water!

Dennis. Huh

Guy. And it's used in pretty much every construction project in the world!

Reggie. Coo

Mindy. And not just in concrete, but in the formation of glass too!

Fingerling. Wow

Guy. And believe it or not, if humans don't start to conserve it, there won't be enough sand to go around.

Dennis. <<Gasp>>

Fingerling. So what does all this have to do with G-Force's diaper house?

Reggie. Coo

Mindy. So glad you asked Thomas Fingerling. So, these researchers wondered if the materials found in dirty diapers, could replace some of the sand typically used to make concrete!

Dennis. Huh. And the diaper concrete could be used to build a whole diaper house!?

Guy. Exactly, Dennis!

Mindy. Okay okay...so for the diaper house in this study, the engineers needed water...

Dennis. Ooo! I'll go get the hose! [Runs off]

Mindy. Cement...

Guy. [Walking away] I-I've got a bag of cement in my garage.

Mindy. Gravel...

Reggie. Coo <<wings flap>>

Mindy. A little bit of sand...

Gramma G-Force. Well here! [Effort] <<sets down heavy thing>> I stole Colonel Toots Thunderpaw's litter box on my way out.

Mindy. Oh uh...okay...I guess that'll do?

Gramma G-Force. Yes, it will.

Dennis. [Running up out of breath] ok... I got the hose!

<<Hose flops down>>

Guy. [Walking up] and here's a bag of cement. [Effort]

<<Heavy bag set down>>

Reggie. Coo

<<Gravel dump??>>

Mindy. Great! Now the only ingredient we still need is the dirty diapers.

Fingerling. Don't worry, Mandy, I gotcha right here...[effort] <<garbage bag plop>>

Everyone. Oh wowwwww!

Mindy. Thomas Fingerling, where did you get a whole pile of dirty diapers?!

Fingerling. From the baby farm.

Everyone. Oh, right...

Mindy. Oh yeah yeah

Reggie. Coo

Dennis. Oh boy! Looks like we got everything we need! Now what?

Guy. Well, after collecting the materials, including a whole lot of diapers...

Fingerling. Check!

Guy. The engineers got to work!

Mindy. In order to use these dirty diapers in the concrete, they first needed to be cleaned. Okay Dennis, i'm putting you in charge of cleaning the dirty diapers.

Dennis. Aww, no! Why can't Tommy do it?

Mindy. Because Thomas Fingerling already collected the diapers!

Dennis. Ok, fine. C'mon reggie.

Reggie. Coo

Dennis. Reggie! You are not busy!

Reggie. Coo

Mindy. Uh here Dennis, take this little scraper I found in Gramma G-Force's wagon to clean out the big stuff.

Dennis. Oh, thank you.

Guy. That's my spatula!

Dennis. Well, now it's my poo remover!

Guy. <<Sigh>>

Mindy. Now once each diaper was cleaned...the engineers then had to...rip em' to shreds!

Gramma G-Force. I want that job.

Mindy. Oh, okay uh great!

Gramma G-Force. I just got my teeth sharpened.

Dennis. Ahhh! No!

Guy. Ew!

Fingerling. G-force!

Mindy. What? No! Not with your teeth Gramma G-Force! Here uh use this shredding tool.

Gramma G-Force. Ok.

Guy. That's my fork!

Gramma G-Force. Well, now it's my diaper mangler.

Reggie. Coo

Guy. Please stop stealing my kitchen utensils!

Gramma G-Force. [Effort] <<rips a diaper>> Ooh yeah, this mangler works real good.

Guy. <<Sigh>>

Mindy. Now, once the diapers were cleaned and shredded, it was time to mix the cement.

Reggie. Coo

Mindy. Gramma G-Force, do you have a large mixing bowl in your wagon of personal belongings there?

Gramma G-Force. Well, let's see here... <<rummaging through wagon>> uh, how bout this tub? [Effort] <<drags bathtub over>>

Reggie. Coo

Guy. What?! You took the bathtub out of the house?

Gramma G-Force. And the bath water too.

Dennis. Oh wow.

Reggie. Coo

Mindy. Okay! Well, I guess we are going to mix our diaper concrete in this bathtub!

Guy. Ok, well what do we do first, Mindy?

Mindy. Well first we need the water.

Fingerling. Already in the tub.

Dennis. Aww! But I wanted to spray the hose!

Mindy. Okay, next thing we need is the cement.

Guy. Got it right here, Mindy! [Effort] <<dumps in cement>>

Mindy. Thank you Guy Raz. And next...the gravel!

Reggie. Coo
<<Wings flap>>
<<Dump gravel>>

Mindy. And the sand.

Dennis. Wait, Mindy! I thought the whole point of this was that we weren't using sand!

Fingerling. Yeah, you said sand was an endangered species or some such thing!

Mindy. Okay, I did not say that. What I said, was that these engineers wondered if the materials found in dirty diapers, could replace *some* of the sand in the concrete!

Guy. Because even a small percentage could make a big difference.

Dennis. Oh.

Gramma G-Force. Okay, a little bit of a Colonel Toots Thunderpaws litter box sand. [Effort] <<litter dumps in slowly>>

Guy. Okay that's enough!

Gramma G-Force. There ya go.

Mindy. And the final ingredient...shredded diapers!

Dennis. Ooo! I get to dump the shredded diapers! [Effort]

<<Diapers being dumped>>

Mindy. And then...they mixed it up! Thomas Fingerling, mind handing me that paddle from Gramma G-Force's wagon over there?

Fingerling. Okey doke.

Mindy. Thaaaank you

Guy. Hey! That's my kayak paddle!

Gramma G-Force. I borrowed it.

Guy. <<Sigh>>

Reggie. Coo

<<Mindy begins mixing the concrete>>

Dennis. Hey Mindy?

Mindy. Yes, Dennis?

Dennis. How did you know how much of each ingredient to use?

Guy. Actually, that's a great question Dennis, how ***did*** you know, Mindy?

<<Still mixing>>

Mindy. Weeeellll... <<stops mixing>> ... I didn't.

Guy and Dennis. You didn't?

Mindy. <<Starts mixing again>> nope! And neither did these engineers when they set out to make their dirty diaper concrete!

Everyone but Mindy and Guy. <<Gasp>>

Reggie. Coo

Guy. Actually, Mindy's right! According to the study, the engineers had to test six different ratio mixtures before they found the right combination of ingredients!

Gramma G-Force. I do not know what ratio means.

Guy. A *ratio* just means the different amounts of each ingredient used, compared to the others.

Fingerling. Oh. Right.

Mindy. Yeah, so if they used too much water compared to the amount of diapers, it might be too liquidy or thin and make the concrete too weak.

Guy. And if they used too much sand and gravel compared to the amount of cement, it might be too thick and grainy, and make the concrete crack once it dries.

Mindy. We'll have to do what the engineers did and test it as a building material!

Fingerling/Dennis. Ohhhh

Gramma G-Force. Well, well

Guy. But before we do that, we have to form it into bricks, and then wait 28 days for them to dry and harden.

Gramma G-Force. What?! I ain't got no 28 days! I need my doo doo diaper hut now!

Mindy. Okay, okay...we'll just keep moving and see what happens when we impatiently build a house out of wet diaper bricks!

Fingerling. [Distance] way ahead of you, Mandy!

Dennis. [Distance] Look! I gave it a veranda!

Mindy. Oh boy

Guy. Wait! Wait! That concrete hasn't even hardened yet! It has absolutely no structural integrity! Anything you build is going to collapse!

Gramma G-Force. I want a moat!

Dennis. Oh, great idea.

Mindy. Ok, so back to the testing. Since these engineers were using used diapers as a building material, they had to make sure that they were safe.

Guy. Safe?

Mindy. Yeah...you know... they had to test for poop in the walls.

Guy. Ahh huh.

Mindy. But what they found was that diaper concrete didn't contain any more microbes or bacteria than regular concrete!

Guy. Really?

Gramma G-Force. [Sniffs] and it don't smell too bad neither!

Guy. The other important test of this diaper concrete, was whether it would be strong enough to handle the weight of an entire house!

Dennis. [Distance] What was that, Guy Raz?! These diaper bricks need to hold an entire house?!

Guy. Yeah, Dennis. A brick needs to be able to support the weight of all the other bricks and materials you stack on top of it.

Dennis. [Distance] oh... well, I just stacked up a third story and added a spiral staircase... these bricks will hold all that, right?

Reggie. Coo

Mindy. Uh you might want to go a little easier there, Dennis! Remember, we didn't know how much of each ingredient to use in making the concrete...

Guy. And we didn't let the bricks dry and harden either.

Fingerling. So what did the engineers discover when they tested the strength of their diaper concrete?

Mindy. Well, they discovered that not only was the diaper concrete just as strong as regular concrete, but that in some cases, depending on what the concrete was used for, it could replace nearly half the sand used in the mixture!

Guy. Wow! And since dirty diapers are free and easy to find, diaper concrete could be a much cheaper alternative to regular concrete...which means..

Mindy. Which means...that homes built with diaper concrete would be more accessible to more people in more parts of the world! People who might not otherwise have enough money to buy a home of their own, built with regular concrete full of sand.

Gramma G-Force. And little ol' Gramma's like me who don't wanna pay rent to their cat landlords.

Guy. That...too, I guess.

Reggie. Coo

Dennis. [Distance] how's it looking, Mindy!?

Mindy. Uh...it's looking a little lopsided...

Guy. Is it starting to collapse?!

Mindy. Maybe?

Dennis. [Distance] oh no!

Reggie. Coo

Fingerling. [Distance] it's ok, it's just starting to lean over on a counta we never let the diaper bricks dry and harden.

Guy. Uh...Mindy?

Mindy. Yes, Guy Razy?

Guy. Uh did you hear that??

Mindy. Hear what?

<<More cracking and collapsing sounds>>

Guy. Uh while the experiment seemed to work for the engineers in this study...i'm not sure it worked as well for us.

<<Crash>>

Mindy. What do you mean?

Everyone. Aaaaaaaaaaaaaahhhhhh!!!

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