FIRM-FILL® Gypsum Concrete

FIRM-FILL® Gypsum Concrete - designed for use in multi-family housing to satisfy acoustical ratings and fire codes. With excellent STC and IIC ratings as well as over 86 UL listings, it is an excellent choice for jobs needing compressive strengths up to 2000 psi.

Weight:	7 psf @ 3/4"
Thickness:	3/4" (19mm) minimum over wood
Compressive Strength:	1200-2000 psi
Patty Size:	8" (203mm) +/- 1/2" (13mm)
Sand Requirements:	1/8" (3mm) or less washed plaster or masonry sand

Surface can be walked on in 90 minutes; finished floor coverings installed in 10 - 14 days, depending on thickness and drying conditions.

Contributes towards multiple LEED® credit areas

FIRM-FILL® 2010

FIRM-FILL® 2010 - designed for use over wood floors, it creates additional surface hardness and stiffens the sub-floor to eliminate squeaks and nail pops creating a durable, flat surface with compressive strengths up to 2500 psi.

Weight:	7.2 psf @ 3/4"
Thickness:	3/4" minimum over wood
Compressive Strength:	1600-2500 psi
Patty Size:	8" (203mm) +/- 1/2" (13mm)
Sand Requirements:	1/8" (3mm) or less washed plaster or masonry sand

Surface can be walked on in 90 minutes; finished floor coverings installed in 10 - 14 days, depending on thickness and correct drying conditions.

Contributes towards multiple LEED® credit areas

FIRM-FILL® 3310

FIRM-FILL® 3310 - offers an innovative formulation that decreases the amount of water used while enhancing the rock-solid strength of the floor, up to 3300 psi. It helps maximize sound control and creates a flat, smooth surface for finished floor coverings.

Weight:	7.6 psf @ 3/4"
Thickness:	3/4" minimum over wood
Compressive Strength:	2000-3300 psi
Patty Size:	7-1/2" (191mm) +/- 1/2" (13mm)
Sand Requirements:	1/8" (3mm) or less washed plaster or masonry sand

Surface can be walked on in 90 minutes; finished floor coverings installed in 7 - 14 days, depending on thickness and drying conditions.

Contributes towards multiple LEED® credit areas

FIRM-FILL® High Strength

FIRM-FILL® High Strength - the economical solution to resurface cracked or damaged concrete floors in commercial, residential or institutional applications. Provides an exceptionally hard surface with compressive strengths up to 3800 psi.

Weight:	7.7 psf @ 3/4"
Thickness:	Feather-edge to 3-1/2"(89mm)
Compressive Strength:	2500-3800 psi
Patty Size:	7-1/2" (191mm) +/- 1/2" (13mm)
Sand Requirements:	1/8" (3mm) or less washed plaster, silica or masonry sand

Surface can be walked on in 90 minutes; finished floor coverings installed in 7 - 14 days, depending on thickness and drying conditions.

Contributes towards multiple LEED® credit areas

FIRM-FILL® 4010

FIRM-FILL® 4010 - an exceptionlly durable cementitious underlayment for thin capping of concrete projects that require the ultimate compressive strength, up to 5500 psi.

Weight:	7.8 psf @ 3/4"
Thickness:	Feather-edge to 1-1/2"(26mm)
Compressive Strength:	3500 to 5500 psi
Patty Size:	7" (177mm) +/- 1/2" (13mm)
Sand Requirements:	1/8" (3mm) or less washed plaster or masonry sand

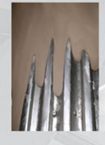
Surface can be walked on in 90 minutes; finished floor coverings installed in 7 - 14 days, depending on thickness and proper drying conditions. It is the ideal underlayment to meet ASTM F 710, *Preparing Concrete to Receive Resilient Flooring*.

Contributes towards multiple LEED® credit areas

FIRM-FILL® CMD

FIRM-FILL® CMD - for light-gauge steel frame construction with a corrugated galvanized steel deck. Lightweight, cost-effective solution to build higher and faster, while achieving excellent sound and fire-ratings.

Weight:	12.8 psf @ 1-9/16"
Thickness:	1" over flutes, total of 1-9/16"
Compressive Strength:	Minimum 3500 psi
Patty Size:	8-1/2" (216mm) +/- 1/2" (13mm)
Sand Requirements:	1/8" (3mm) or less washed plaster or masonry sand



Surface can be walked on in 90 minutes; finished floor coverings installed in 10 - 14 days, depending on thickness and drying conditions.

Contributes towards multiple LEED® credit areas

GYP-SPAN® Radiant

GYP-SPAN® Radiant - installed over hydronic tubes or electrical cables, it acts as an efficient thermal mass for even distribution of heat without hotspots, air bubbles or shrinkage cracks.

Weight:	14.6 psf @ 1-1/2"
Thickness:	3/4" over tubes, total of 1-1/2"
Compressive Strength:	2000-3200 psi
Patty Size:	8" (203mm) +/- 1/2" (13mm)
Sand Requirements:	1/8" (3mm) or less washed plaster or masonry sand

Surface can be walked on in 90 minutes; finished floor coverings installed in 10 - 14 days, depending on thickness and drying conditions.

Contributes towards multiple LEED® credit areas

TRUE-SCREED® CLU

TRUE-SCREED® CLU - Portland cement-based, leveling underlayment that is specifically designed for projects that need to stay on budget. Transforms cracked, uneven concrete floors into a smooth, strong surface for finished floor coverings.

Weight:	4.87 psf @ 1/2"
Thickness:	1/2" - 2"
Compressive Strength:	up to 6000 psi
Sand Requirements:	1/8" (3mm) or less washed plaster, silica or masonry sand

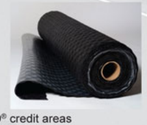
Depending on substrate, shotblasting, scarifying or sandblasting to meet ICRI CSP 3+ may be required. Installation of finished floor coverings in as little as 24 hours, depending on thickness.

Hacker Sound Mat II

Hacker Sound Mat II - a durable, environmentally-friendly sound control mat composed of 100 percent recycled rubber that helps provide a quieter environment and meets demanding project specifications.

Weight:	95 oz./sq. yd.
Thickness:	1/4"
Width:	54"
Phil Test DOC-FF 1-70:	Pass
Steiner Tunnel Test:	NFPA Class B UBC Class II

Helps projects obtain LEED® credits while reducing sound transmission; increases STC and IIC ratings. System rated for commercial & residential use per ASTM C627.



Contributes towards multiple LEED® credit areas

Hacker TopCoat™ SP

Hacker TopCoat™ SP - an acrylic-based, film-forming surface preparation agent designed for use over gypsum concrete floor underlayments. When used in conjunction with (HFU), it provides the optimal surface preparation agent for resilient floor coverings per ASTM F2419.

- For use between HFU and floor covering adhesives
- Built-in color identifier to assure compliance with ASTM Standards
- Available from trained, Licensed Applicators of Hacker Industries, Inc.

Approved Hacker Floor Underlayments: FIRM-FILL® Gypsum Concrete, FIRM-FILL® 2010, FIRM-FILL® 3310, FIRM-FILL® High Strength, FIRM-FILL® 4010 FIRM-FILL® CMD and GYP-SPAN® Radiant.

Hacker Industries, Inc. was established upon the simple belief that when given a choice of floor underlayments, the building community would choose the product of greater value. This basic mission statement has formed the foundation of a growing business for the past 25 years. Our consistent commitment has been to supply extraordinary value through the highest quality floor underlayments applied by the best Licensed Applicators.

Since 1983, over two billion square feet of Hacker Floor Underlayments have installed in residential, multi-family and commercial projects across North America. Over wood, steel deck, concrete or radiant tubes, Hacker Floor Underlayments provide sound and fire resistance, an effective thermal mass and a flat, solid surface for finished floor coverings.

All Hacker floor underlayments meet ASTM F2419; Standard Practice for the Installation of Thick Poured Gypsum Concrete Underlayments. With 86 Underwriters Laboratories listings, and approvals from ICC-ES and HUD, our products meet demanding project specifications and exceed the expectations of everyone involved in the construction project. Hacker Industries is a member of NAHB's National Council of the Housing Industry - The Supplier 100.

Hacker Industries, Inc. does not sell its products directly to the general public. Rather, it provides distribution through a network of trained, Licensed Applicators. This ensures that the end user will have the highest quality floor available in the market today.

Let Our Products Floor You®.

CONTINUING EDUCATION AIA

NAHB NATIONAL BUILDING CONTRACTOR MEMBER

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(949) 729-3101
FAX: (800) 906-8548
(949) 729-3108

Choosing the Right Underlayment

			Type or Building	Type or Subfloor	Recommended PSI	Firm-Fill® Gypsum Concrete	Firm-Fill® 2010	Firm-Fill® 3310	Firm-Fill® High Strength	Firm-Fill® 4010	Firm-Fill® CMD	Gyp-Span® Radiant	True-Screed® CLU
Multifamily	Wood-New	1200-3300 psi	R	R		R	R						
	Wood-Renovation	1500-3300 psi	O			R	R						
	Concrete-New	2500-5500 psi		O	O	O	O		R	R			
	Concrete-Renovation	2500-5500 psi				R	R		R	R			
	Corrugated Steel Deck	Min. 3500 psi				O	O					R	
	Radiant Heating	2000-3200 psi											
Single-family	Wood-New	1200-3300 psi		R	R	R	R						
	Wood-Renovation	1500-3300 psi		O		R	R						
	Concrete-New	2500-5500 psi				O	O		R	R			
	Concrete-Renovation	2500-5500 psi				O	O		R	R			
	Radiant Heating	2000-3200 psi										R	
Commercial	Wood-New	1500-3300 psi		O	R	R	R						
	Wood-Renovation	1500-3300 psi		O		R	R						
	Concrete-New	2500-5500 psi			O	O	O					R	
	Concrete-Renovation	2500-5500 psi				O	O					R	
	Corrugated Steel Deck	Min. 3500 psi											
	Radiant Heating	2000-3200 psi										R	

R = Recommended; O= Optional

You may also visit www.HackerIndustries.com for additional assistance on Choosing the Right Underlayment

Underwriters Laboratory Design Numbers

G565	J991	L206	L504	L513	L522	L532
L541	L551	L562	J917	J994	L208	L505
L514	L523	L533	L542	L552	L563	J919
K906	L209	L506	L515	L524	L534	L543
L553	L571	J920	L001	L210	L507	L516
L525	L535	L545	L555	J924	L004	L211
L508	L517	L526	L536	L546	L556	J927
L005	L212	L509	L518	L527	L537	L547
L557	J931	L006	L501	L510	L519	L528
L538	L548	L558	J957	L201	L502	L511
L520	L529	L539	L549	L559	J966	L202
L503	L512	L521	L530	L540	L550	L560
L585	L598					

Code Approvals

ICC-ES Legacy Report ER-4147

City of Los Angeles Research Report No. 24540
Metropolitan Dade County, Florida No. 96-0516.03

FHA-HUD MR1255

UL of Canada Design Numbers L512, M505, M506, M507, M508, M509, M518

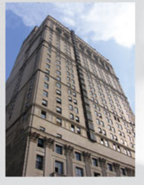
Tile Council of North America Methods (F180, F200, RH111, RH122)

Quality Control

Hacker Floor Underlayments are installed by Licensed Applicators who are trained by Hacker Industries, Inc. to adhere to Quality Assurance Standards, which include compressive strength testing, field quality audits, technical updates and continuing education seminars.

FOR AN ESTIMATE, PLEASE CONTACT YOUR LOCAL LICENSED APPLICATOR:

Hacker Industries, Inc.



PRODUCT GUIDE

Firm-Fill® Gypsum Concretes

Gyp-Span® Radiant

True-Screed® Cementitious Underlayment