



Multi-Panels

GREEN AND FIREPROOF CONSTRUCTION

Price • Performance • Peace of Mind


ASSEMBLY GUIDEBOOK FOR FIRE & ACOUSTIC TESTING



MULTI-PANELS, INC.

+1 617.714.0266 | info@multi-panels.com

Doc# AB.FA | Rev 1/10/2024



Multi-Panels has prepared this guide as a reference to various fire and sound rated assemblies which the products have been tested. Some assemblies have only been tested for fire or sound. Important to note that this guide does not include all available assemblies. If you are looking for a solution not listed here, please contact a representative to discuss your needs.

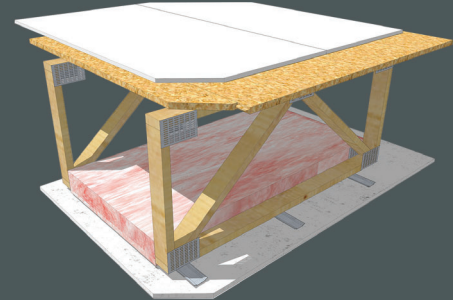
Table of Contents:

DESCRIPTION	DOC #	PAGE
Fire-Rated Assembly Reference Chart	AT.FAC	3
M4 Underlayment Sell Sheet - Fire & Acoustic - UL L528, System 27 1-hour floor / ceiling. M4 Underlayment + OSB over Open Web Wood Truss	MS.FAL52827	4
Nocom Subfloor Sell Sheet - Fire & Acoustic - UL L528, System 26 1-hour floor / ceiling. Nocom Subfloor over Open Web Wood Truss	NS.FAL52826	5
Nocom Subfloor Sell Sheet - Fire & Acoustic - UL H514 1 & 2-hour floor / ceiling. Nocom Subfloor over Steel C-Joists	NS.FAH514	6
Nocom Subfloor Sell Sheet - Fire & Acoustic - UL H514 w/ Sound Clips 1 & 2-hour floor / ceiling. Nocom Subfloor over Steel C-Joists	NS.FAH514SC	7

Always be sure to reference complete assemblies in test reports or as listed by UL, ICC, Intertek, QAI, etc. Images / descriptions in this guide are for reference only. Multi-Panels does not guarantee accuracy of the images / descriptions in this guidebook. Assemblies must be designed and built to the tested assembly to meet listed performance.

FIRE RATED ASSEMBLY REFERENCE CHART

Multi-Panels specializes in providing high-quality structural and fire-resistant building panels for various applications such as subfloor, underlayments, roof decking, wall sheathing and fire-barriers. Here is an overview of those products which have been included in various fire-rated assemblies. Always refer to complete test reports for full details on performance and design, which are available upon request.



Product	Application	Design	Hourly Rating		Framing members		Layers Gypsum
			1	2	Material	Description	
NOCOM	SUBFLOOR	UL H514	X	X	Steel	Steel C Joist Steel Truss (various) FrameCAD	1
NOCOM	SUBFLOOR	UL H514 (alt ceiling)	X		Steel	Steel C Joist Steel Truss (various) FrameCAD	2 (RC 24"oc)
NOCOM	SUBFLOOR	UL L580 (s.3)	X		Steel	MarinoWARE JoistRite	2
NOCOM	SUBFLOOR	UL M527 (s.5)	X		Steel	Sustainable / Supaloc Trusses	1
NOCOM	SUBFLOOR	UL L528 (s.26)	X		Wood	Open Web Wood Trusses	1
NOCOM	SUBFLOOR	UL L587	X		Wood	Open Web Wood Trusses	1
NOCOM	ROOF DECK	UL P569	X		Steel	Steel Trusses (various) + Steel Roof Deck	1
M4	UNDERLAYMENT	UL L587 (s.28 & s.29)	X		Wood	Open Web Wood Trusses	1
M4	UNDERLAYMENT	UL L528 (s.26 & s.27)	X		Wood	Open Web Wood Trusses	1
M4	WALL SHEATHING	ASTM E119	X		Steel / Wood	3-5/8" Steel Stud 2" x 4" Wood Stud	1
M4 FRB	FIRE/WEATHER BARRIER	ASTM E119	X		Wood	2" x 6" Wood Stud	1

Important: All applications to be reviewed and approved by licensed design professional as meeting requirements of application & local building code. Assemblies must be built as-tested and per published designs to achieve published performance. Please refer to complete tested assemblies for requirements. Failure to follow current installation instructions may affect product performance & warranty.



NOCOM STRUCTURAL CEMENT
BOARD BUILDING UNIT
FIRE RESISTANCE CLASSIFICATION
SEE UL FIRE-RESISTANCE DIRECTORY



M4 UNDERLAYMENT
BUILDING UNIT
FIRE RESISTANCE CLASSIFICATION
SEE UL FIRE-RESISTANCE DIRECTORY



NOCOM SUBFLOOR
QAI B1136-1



M4 SHEATHING ESR-3840
NOCOM SHEATHING ESR-4268

**IF YOU ARE SEEKING A SYSTEM
OR PERFORMANCE NOT SHOWN
PLEASE CONTACT US TO REVIEW**

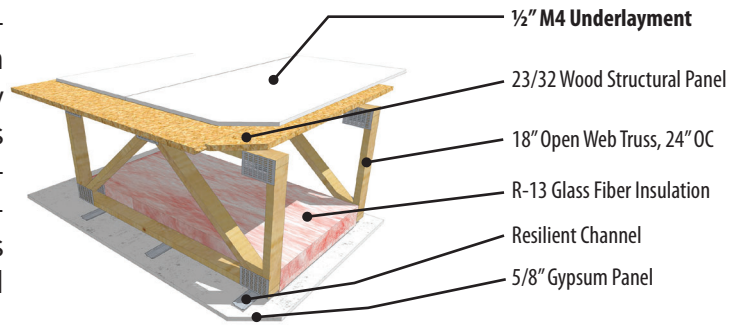
Installation Specs, Submittals &
Tech Info available online at:
www.multi-panels.com

Multi-Panels, Inc.
+1 617.714.0266
info@multi-panels.com
Doc# AT.FAC | Rev 1/10/2024

M4 UNDERLAYMENT

FIRE & SOUND RATED ASSEMBLY 1-HOUR FIRE-RESISTANCE UL L528 – FLOOR SYSTEM NO. 27

M4 Underlayment is a simple and cost-effective alternative to poured toppings when seeking fire and sound ratings in multi-story construction. 1/2" M4 Underlayment installs quickly over 23/32 OSB allowing the elimination of curing time, delays and added moisture of poured systems. Once installed M4 is ready for foot-traffic, installation of walls and finishes.



M4 Underlayment: Lightweight, No Curing Time, Installs Quickly with Glue / Nails / Staples, Mold / Pest / Abuse Resistant, Sealed, Noncombustible, No Silica, No Chloride & More

ACOUSTICAL TESTING ON THE UL L528 1-HOUR FLOOR ASSEMBLY

Floor Covering	None (bare)*	6.8 mm LVP (loose laid)	Carpet	Ceramic Tile	5.5mm click lock LVT	Engineered Wood
Sound Mat	None	None	Carpet Pad	5mm Rubber Mat	None	None
Base Assembly	18" OWT + 23/32" OSB + 1/2" M4 Underlayment (UL L528 – Floor System No. 27)					
Ceiling	RC Deluxe @ 16" OC with R-13 Unfaced Insulation					
Gypsum Board	1 layer 5/8" Type C	1 layer 5/8" Type C	1 layer 5/8" Type C	1 layer 5/8" Type C	1 layer 5/8" Type C	1 layer 5/8" Type C
STC	59	59	59	60	59	59
IIC	52	56	78	59	57	58
HIIC	52	67	91	62	62	66
Test Number	P4435.01	P4435.02	P4435.03	P4435.04	P4435.00A	P4435.00B

*Bare assembly for information only. M4 Underlayment must receive floor coverings.

Important: All applications to be reviewed and approved by licensed design professional as meeting requirements of application & local building code. Assemblies must be built as-tested and per published designs to achieve published performance. Please refer to complete UL and acoustical assemblies for requirements. Failure to follow current installation instructions may affect product performance & warranty coverage.

Test Standards:

- ▶ ASTM E119 / UL 263 - Fire-Resistance Testing
- ▶ ASTM E90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions (STC – Sound Transmission Class)
- ▶ ASTM E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor Ceiling Assemblies Using the Tapping Machine
- ▶ ASTM E3222 Standard Classification for Determination of High-Frequency Impact Sound Ratings



BUILDING UNIT
FIRE RESISTANCE CLASSIFICATION
SEE UL FIRE-RESISTANCE DIRECTORY

IF YOU ARE SEEKING A SYSTEM OR PERFORMANCE NOT SHOWN PLEASE CONTACT US TO REVIEW

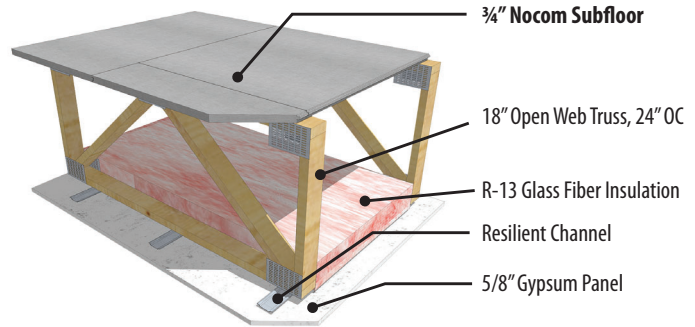
Installation Specs, Submittals &
Tech Info available online
at: www.multi-panels.com

Multi-Panels, Inc.
+1 617.714.0266
info@multi-panels.com
Doc# MS.FAL52827 | Rev 1/10/2024

NOCOM SUBFLOOR

FIRE & SOUND RATED ASSEMBLY 1-HOUR FIRE-RESISTANCE UL L528 – FLOOR SYSTEM NO. 26

NOCOM is a strong, durable subfloor solution for fire and acoustic rated floor assemblies in multi-story residential & commercial construction. At only ¾" thick, NOCOM panel makes an ideal alternative to poured decking systems, avoiding curing time and speeding up installation while offering various fire and acoustic ratings with a variety of finish systems.



NOCOM Subfloor: No Curing Time, Installs Quickly with Nails / Screws, Sealed, T&G Edges, Mold / Pest / Abuse Resistant, Noncombustible, No Silica, No Chloride & More

ACOUSTICAL TESTING ON THE UL L528 1-HOUR FLOOR ASSEMBLY

Floor Covering	None (bare)*	6.8 mm LVP (loose laid)	Carpet	Ceramic Tile	5.5mm click lock LVT	Engineered Wood
Sound Mat	None	None	Carpet Pad	5mm Rubber Mat	None	None
Base Assembly	18" OWT + ¾" Nocom Subfloor (UL L528 – Floor System No. 26)					
Ceiling	RC Deluxe @ 12" OC with R-13 Unfaced Insulation					
Gypsum Board	1 Layer 5/8" Type C					
STC	58	59	59	60	59	59
IIC	41	50	77	56	50	52
HIIC	41	61	89	57	52	56
Report Number	P4435.05	P4435.06	P4435.07	P4435.08	P4435.00C	P4435.00D

*Bare assembly for information only. Nocom Subfloor must receive floor coverings.

Important: All applications to be reviewed and approved by licensed design professional as meeting requirements of application & local building code. Assemblies must be built as-tested and per published designs to achieve published performance. Please refer to complete UL and acoustical assemblies for requirements. Failure to follow current installation instructions may affect product performance & warranty coverage.

Test Standards:

- ▶ ASTM E119 / UL 263 - Fire-Resistance Testing
- ▶ ASTM E90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions (STC – Sound Transmission Class)
- ▶ ASTM E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor Ceiling Assemblies Using the Tapping Machine
- ▶ ASTM E3222 Standard Classification for Determination of High-Frequency Impact Sound Ratings



BUILDING UNIT
FIRE RESISTANCE CLASSIFICATION
SEE UL FIRE-RESISTANCE DIRECTORY

IF YOU ARE SEEKING A SYSTEM OR PERFORMANCE NOT SHOWN PLEASE CONTACT US TO REVIEW

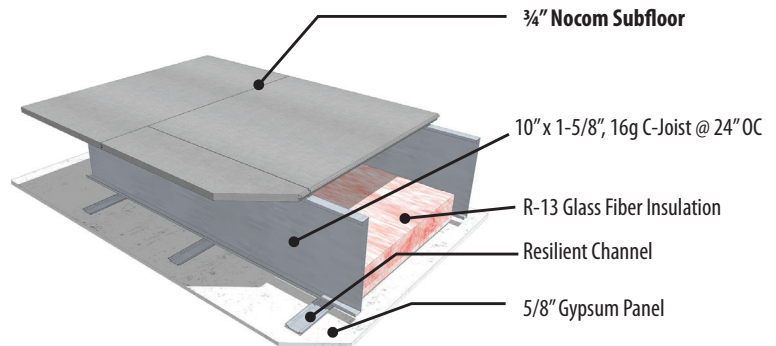
Installation Specs, Submittals &
Tech Info available online
at: www.multi-panels.com

Multi-Panels, Inc.
+1 617.714.0266
info@multi-panels.com
Doc# NS.FAL52826 | Rev 1/10/2024

NOCOM SUBFLOOR

FIRE & SOUND RATED ASSEMBLY - 1 & 2-HOUR FIRE-RESISTANCE UL H514

NOCOM is a strong, durable subfloor solution for fire and acoustic rated floor assemblies in multi-story residential & commercial construction. At only $\frac{3}{4}$ " thick, NOCOM panel makes an ideal alternative to poured decking systems, avoiding curing time and speeding up installation while offering various fire and acoustic ratings with a variety of finish systems.



NOCOM Subfloor: No Curing Time, Installs Quickly with Screws, Sealed, T&G Edges, Mold / Pest / Abuse Resistant, Noncombustible, No Silica, No Chloride & More

ACOUSTICAL TESTING ON THE UL H514 1 & 2 HOUR FLOOR ASSEMBLY

Floor Covering	None (bare)*	Carpet	5.5mm click lock LVT
Sound Mat	None	Carpet Pad	5mm Regupol Sonus
Base Assembly	10" C Joist OWT + $\frac{3}{4}$ " Nocom Subfloor (UL H514)		
Ceiling	RC Deluxe @ 12" OC with R-13 Unfaced Insulation		
Gypsum Board	1 Layer 5/8" Type C		
STC	51	54	56
IIC	29	72	50
HIIC	28	87	60
Report Number	J8051.01	J8051.03	J8051.02

***Bare assembly for information only. Nocom Subfloor must receive floor coverings.**

Important: All applications to be reviewed and approved by licensed design professional as meeting requirements of application & local building code. Assemblies must be built as-tested and per published designs to achieve published performance. Please refer to complete UL and acoustical assemblies for requirements. Failure to follow current installation instructions may affect product performance & warranty coverage.

Test Standards:

- ASTM E119 / UL 263 - Fire-Resistance Testing
- ASTM E90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions (STC – Sound Transmission Class)
- ASTM E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor Ceiling Assemblies Using the Tapping Machine
- ASTM E3222 Standard Classification for Determination of High-Frequency Impact Sound Ratings



BUILDING UNIT
FIRE RESISTANCE CLASSIFICATION
SEE UL FIRE-RESISTANCE DIRECTORY

IF YOU ARE SEEKING A SYSTEM OR PERFORMANCE NOT SHOWN PLEASE CONTACT US TO REVIEW

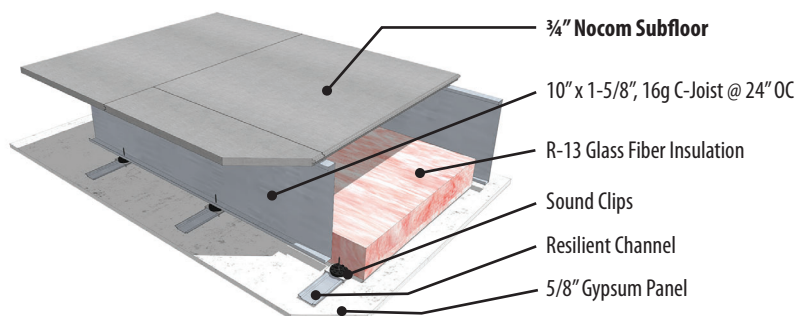
Installation Specs, Submittals &
Tech info available online at:
www.multi-panels.com

Multi-Panels, Inc.
+1 617.714.0266
info@multi-panels.com
Doc# NS.FAH514 | Rev 1/10/2024

NOCOM SUBFLOOR

FIRE & SOUND RATED ASSEMBLY 1 & 2-HOUR FIRE-RESISTANCE UL H514 – SOUND CLIPS

NOCOM is a strong, durable subfloor solution for fire and acoustic rated floor assemblies in multi-story residential & commercial construction. At only $\frac{3}{4}$ " thick, NOCOM panel makes an ideal alternative to poured decking systems, avoiding curing time and speeding up installation while offering various fire and acoustic ratings with a variety of finish systems.



M4 Underlayment: Lightweight, No Curing Time, Installs Quickly with Glue / Nails / Staples, Mold / Pest / Abuse Resistant, Sealed, Noncombustible, No Silica, No Chloride & More

ACOUSTICAL TESTING ON THE UL H514 1 & 2 HOUR FLOOR ASSEMBLY

Floor Covering	Carpet	6.8mm LVP	Engineered Wood	Engineered Wood	Ceramic Tile
Sound Mat	Carpet Pad	5mm Regupol Sonus	6mm Regupol SonusWave	6mm Regupol SonusWave	5mm Regupol Sonus
Base Assembly	10" C Joist + $\frac{3}{4}$ " Nocom Subfloor (UL H514)				
Ceiling*	Regupol SonusClip w/ Hat Channel @ 12" OC with R-13 Unfaced Insulation				
Gypsum Board	1 Layer 5/8" Type C	1 Layer 5/8" Type C	1 Layer 5/8" Type C	2 Layers 5/8" Type C	2 Layers 5/8" Type C
STC	55	58	57	58	61
IIC	77	55	54	58	58
HIIC	89	66	65	67	59
Report Number	J8051.06	J8051.04	J8051.05	J8051.07	J8051.08
UL H514 Fire Rating	2 Hours	2 Hours	2 Hours	2 Hours	2 Hours

*Note UL H514 offers an 'Alternate Construction' allowing hat channels and sound clips spaced at 24" OC. Per current UL H514 this requires 2 layers of Type C gypsum board and reduces listed UL H514 rating to one hour.

Important: All applications to be reviewed and approved by licensed design professional as meeting requirements of application & local building code. Assemblies must be built as-tested and per published designs to achieve published performance. Please refer to complete UL and acoustical assemblies for requirements. Failure to follow current installation instructions may affect product performance & warranty coverage.

Test Standards:

- ▶ ASTM E119 / UL 263 - Fire-Resistance Testing
- ▶ ASTM E90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions (STC – Sound Transmission Class)
- ▶ ASTM E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor Ceiling Assemblies Using the Tapping Machine
- ▶ ASTM E3222 Standard Classification for Determination of High-Frequency Impact Sound Ratings



BUILDING UNIT
FIRE RESISTANCE CLASSIFICATION
SEE UL FIRE-RESISTANCE DIRECTORY

IF YOU ARE SEEKING A SYSTEM OR PERFORMANCE NOT SHOWN PLEASE CONTACT US TO REVIEW

Installation Specs, Submittals &
Tech Info available online
at: www.multi-panels.com

Multi-Panels, Inc.
+1 617.714.0266
info@multi-panels.com
Doc# NS.FAH514SC | Rev 1/10/2024



+1 617.714.0266



info@multi-panels.com



www.multi-panels.com