DRYWALL GRID SOUND ISOLATION SOLUTION – Flat Ceilings

FrameAll™ Drywall Grid

A FrameAll™ Drywall Grid Solution

Armstrong® FrameAll™ Drywall Grid is 3x faster than traditional track and channel framing – saving you time and labor.

KEY SELECTION ATTRIBUTES

- This sound solution is designed to reduce sound transmission in assemblies using Armstrong drywall grid
- HD8906IIC main beam has a special IIC knockout every 8" along the main to accept the Impact Isolation Clips (IIC)
- This IIC solution can provide up to eight points of IIC improvement
- PeakForm® patented profile increases strength and stability for improved performance during installation
- XL® (staked-on end detail) cross tees provide secure locked connection; fast and easy to install
- SuperLock™ main beam clip is engineered for a strong, secure connection and fast, accurate alignment confirmed with an audible click; easy to remove and relocate
- ScrewStop™ reverse hem prevents screw spin off on 1-1/2" wide face
- new Knurled Ridges on cross tees improve screw grab during board application
- Rotary-stitched during manufacture by a patented method for additional torsional strength and extra stability during installation
- HD8906 (HRC) main beams and cross tees with extra routings for Type F light fixtures
- Minimum G40 hot dipped galvanized coating, per ASTM C645
- All drywall components minimum .018" steel thickness; complies with ASTM C645
- Fire Guard™ components meet broad range of UL® design assemblies (XL7936G90 is not fire rated)
- 10-Year Limited System Warranty
- 30-Year Limited Ceiling Systems Warranty

Impact Isolation Clip (IIC):

- Designed to decouple the sound transfer between the ceilling and the structure assembly above improving the sound performance
- These isolators can carry one or two layers of drywall

TYPICAL APPLICATIONS

- Indoor/outdoor applications
- Soffits/special transitions
- High visibility areas
- Combination drywall and acoustical panel or tile ceilings
- Barrel vaults and domes
- Wet installations (stucco/plaster)

FIRE RESISTANCE RATING

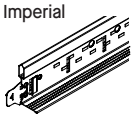
Meets a broad range of UL design assemblies: D501, D502, G523, G524, G526, G527, G528, G529, I504, I512, I518, J502, L502, L508, L513, L515, L525, L526, L529, L564, P501, P506, P507, P508, P509, P510, P513, P514, P516 (XL7936G90 and SP135 are not fire rated).

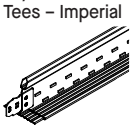
NOTE: See UL Directory for details on specific designs.

MATERIALS

ASTM C635 Heavy-duty main beam classification, ASTM A653 zinc-coated hot dipped galvanized steel. Exposed surfaces chemically cleansed, zinc-coated, and prefinished. Materials conform to the performance standard ASTM C645 (Standard Specification for Rigid Furring Channels for Screw Applications of Gypsum Board).

VISUAL SELECTION / PACKAGING / LOAD TEST DATA (LBS./LF)

	Item No.	Length	Height	Pcs./ Ctn.	LF./ Ctn.	L/240 Simple Span 24"	L/240 Simple Span 36"	L/240 Simple Span 48"	L/360 Simple Span 24"	L/360 Simple Span 36"	L/360 Simple Span 48"
Drywall Main Beams – Imperial 	HD8906IIC	144"	1-11/16"	12	144	120.0	95.5	28.14	95.5	43.19	18.66

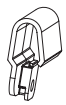
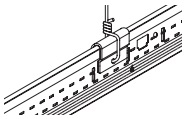
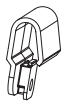
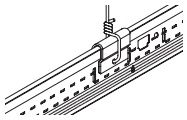
	Item No.	Length	Height	Pcs./ Ctn.	LF/ Ctn.	L/240 Simple Span	L/360 Simple Span
Drywall Cross Tees – Imperial 	XL8965 XL8965HRC XL8965G90	72"	1-1/2"	36	216	6.87 @ 72"	4.58 @ 72"
	XL8947P XL8947PG90	50"	1-1/2"	36	150	19.5 @ 50"	12.79 @ 50"
	XL8945P XL8945PHRC XL8945PG90	48"	1-1/2"	36	144	22.5 @ 48"	14.27 @ 48"
	XL8940	40"	1-1/2"	36	119	36.22 @ 40"	24.15 @ 40"
	XL8926 XL8926G90	24"	1-1/2"	36	72	119.0 @ 24"	90.25 @ 24"

FRAMEALL™ DRYWALL GRID – Standard

DRYWALL GRID SOUND ISOLATION SOLUTION – Flat Ceilings

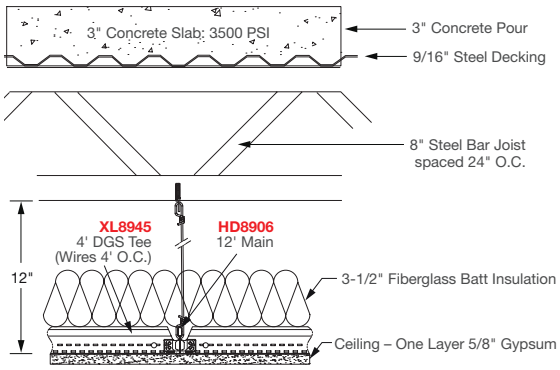
Suspension Systems

VISUAL SELECTION

Item No.	Description	
IIC Clip 36 pcs/bucket	Impact Isolation Clip for use with HD8906IIC drywall grid main beam. Provides up to 8 points of IIC improvement to ensure your project meets IBC requirements. Clip Color: Natural **IIC Clip must be used with HD8906IIC Drywall Grid Main Beam**	 
IIC2 Clip 36 pcs/bucket	Impact Isolation Clip for use with HD8906IIC drywall grid main beam. For conditions requiring two layers of drywall. Clip Color: Green IIC Clip must be used with HD8906IIC Drywall Grid Main Beam	 

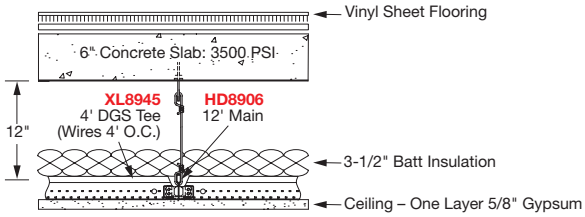
STANDARD ASSEMBLIES – 1 LAYER OF DRYWALL

Armstrong Standard Drywall Grid Assembly 1:



Item No.	Armstrong Assembly	Building Structure	STC	IIC
HD8906 XL8945	12' Main Beam / 4' Cross Tee 3-1/2" Batt Insulation 5/8" Gypsum	Bare Concrete Base 3" Concrete Slab Fluted Steel Decking 8" Bar Joist, 24" O.C.	55	47

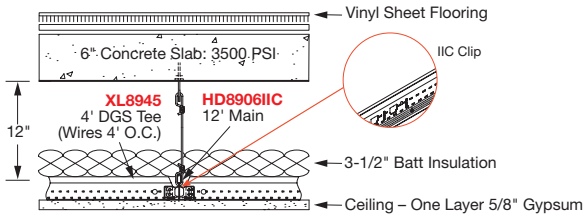
Armstrong Standard Drywall Grid Assembly 2



Item No.	Armstrong Assembly	Floor Structure	IIC	Gain*
HD8906 XL8945	12' Main Beam / 4' Cross Tee 3-1/2" Batt Insulation 5/8" Gypsum	6" Thick Slab Concrete Base with Vinyl Sheet Flooring	57	58

ARMSTRONG IIC SOLUTION ASSEMBLIES – 1 LAYER OF DRYWALL

Armstrong IIC Drywall Grid Assembly 1:
Concrete Slab Structure



Item No.	Armstrong Assembly	Floor Structure	IIC	Gain*
HD8906IIC XL8945 IIC Clip	12' Main Beam / 4' Cross Tee IIC Clip 3-1/2" Batt Insulation 5/8" Gypsum	6" Thick Slab Concrete Base with Vinyl Sheet Flooring	66	+8

* Results are compared to Armstrong standard Drywall Grid Assembly 2

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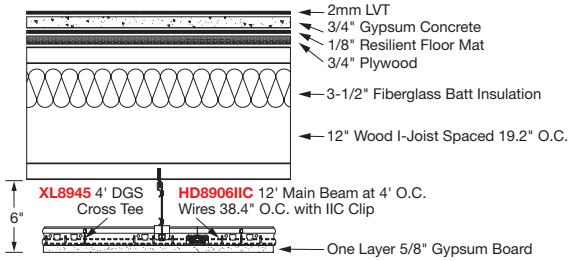
Suspension Systems

ARMSTRONG IIC FRAMEALL™ DRYWALL GRID ASSEMBLIES – 1 LAYER OF DRYWALL (continued)

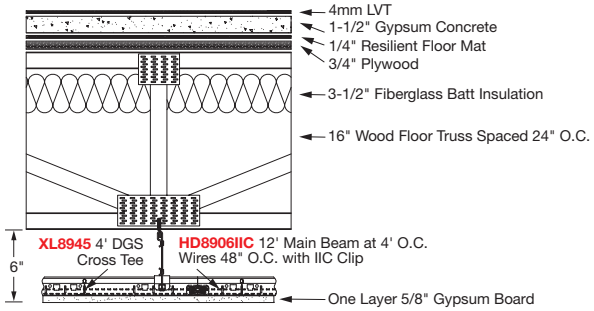
Armstrong IIC Drywall Grid Assembly 2:
Wood I-Joist Structure



Item No.	Armstrong Assembly	Floor Structure	IIC	Gain*
HD8906IIC XL8945P IIC Clip	12' Main Beam / 4' Cross Tee IIC Clip 3-1/2" Batt Insulation 5/8" Gypsum	2mm LVT 3/4" Gypsum Concrete 12" Wood I-Joist	55	+4

* Results are compared to RC – Deluxe

Armstrong IIC Drywall Grid Assembly 3:
Wood Floor Truss Structure

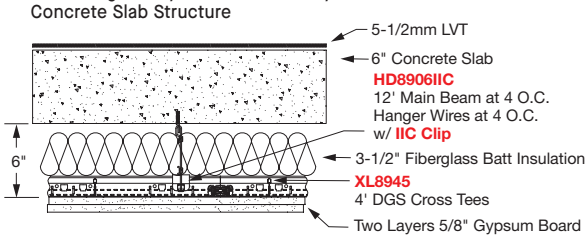


Item No.	Armstrong Assembly	Floor Structure	IIC	Gain*
HD8906IIC XL8945P IIC Clip	12' Main Beam / 4' Cross Tee IIC Clip 3-1/2" Batt Insulation 5/8" Gypsum	4mm LVT 1-1/2" Gypsum Concrete 16" Wood Floor Truss	60	+4

* Results are compared to RC – Deluxe

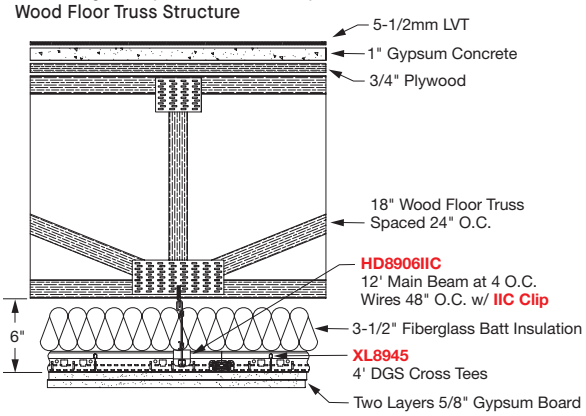
ARMSTRONG IIC FRAMEALL™ DRYWALL GRID ASSEMBLIES – 2 LAYERS OF DRYWALL

Armstrong IIC Drywall Grid Assembly 1:
Concrete Slab Structure



Item No.	Armstrong Assembly	Building Structure	STC	IIC
HD8906IIC XL8945 IIC2 Clip	12' Main Beam / 4' Cross Tee IIC2 Clip 3-1/2" Batt Insulation 2 Layers – 5/8" Gypsum	5-1/2mm LVT 6" Thick Slab Concrete Base	61	62

Armstrong IIC Drywall Grid Assembly 2:
Wood Floor Truss Structure



Item No.	Armstrong Assembly	Floor Structure	STC	IIC
HD8906IIC XL8945 IIC2 Clip	12' Main Beam / 4' Cross Tee IIC2 Clip 3-1/2" Batt Insulation 2 Layers – 5/8" Gypsum	5-1/2mm LVT 1" Gypsum Concrete 3/4" Plywood 18" Wood Floor Truss	61	58

WHY SOUND CONTROL MATTERS

The International Building Code (Section 1206) provides guidelines to ensure that construction meets suitable sound isolation performance. These guidelines are used for commercial and multiple-family buildings such as: offices, apartments, hospitals, dormitories, schools, hotels, condominiums, mixed-use buildings.

The IBC uses two sound classes to make sure these guidelines are met. Sound Transmission Class (STC) – sound transmitted through the air such as voices and music. Impact Insulation Class (IIC) – sound transmitted through the building structure such as foot traffic and objects dropped on the floor.

A rating of 50 or above for both STC and IIC sound tests will satisfy the IBC's minimum requirements, with one or two layers of drywall using FrameAll™ Drywall Grid.

STC/IIC PERFORMANCE GUIDELINES

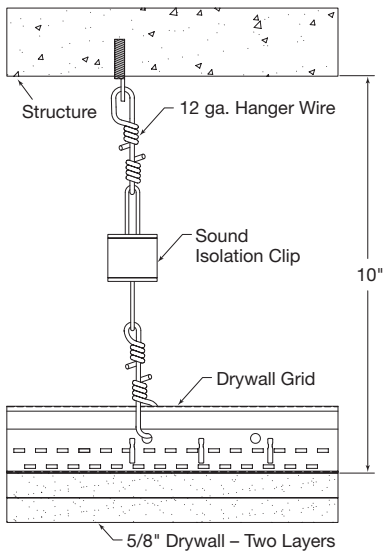
STC/IIC Ratings	Description
60	Superior soundproofing
55	**EXCELLENT**
50	Loud speech barely audible
45	Some loud speech audible – not understood
30	Loud speech audible – well understood
25	Regular speech audible and understood through walls

Changes in STC/IIC Ratings	Description
+ / - 1	Almost perceptible
+ / - 3	Just perceptible
+ / - 5	**CLEARLY PERCEPTIBLE**
+ / - 10	Twice (or half) as loud

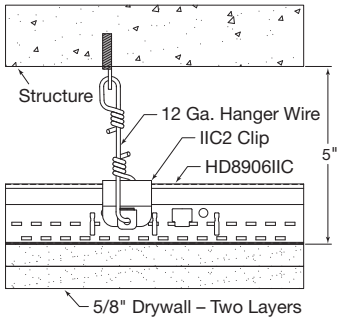
ARMSTRONG SOLUTION FEATURES:

- Easier to detail, specify, and 50% faster to build than traditional track
- Armstrong Drywall Grid tested assemblies provide proven results and piece of minds

TRADITIONAL IIC Solution



ARMSTRONG IIC Solution



FRAMEALL™ DRYWALL GRID – Standard

Armstrong® World Industries