

SIMPLICITY

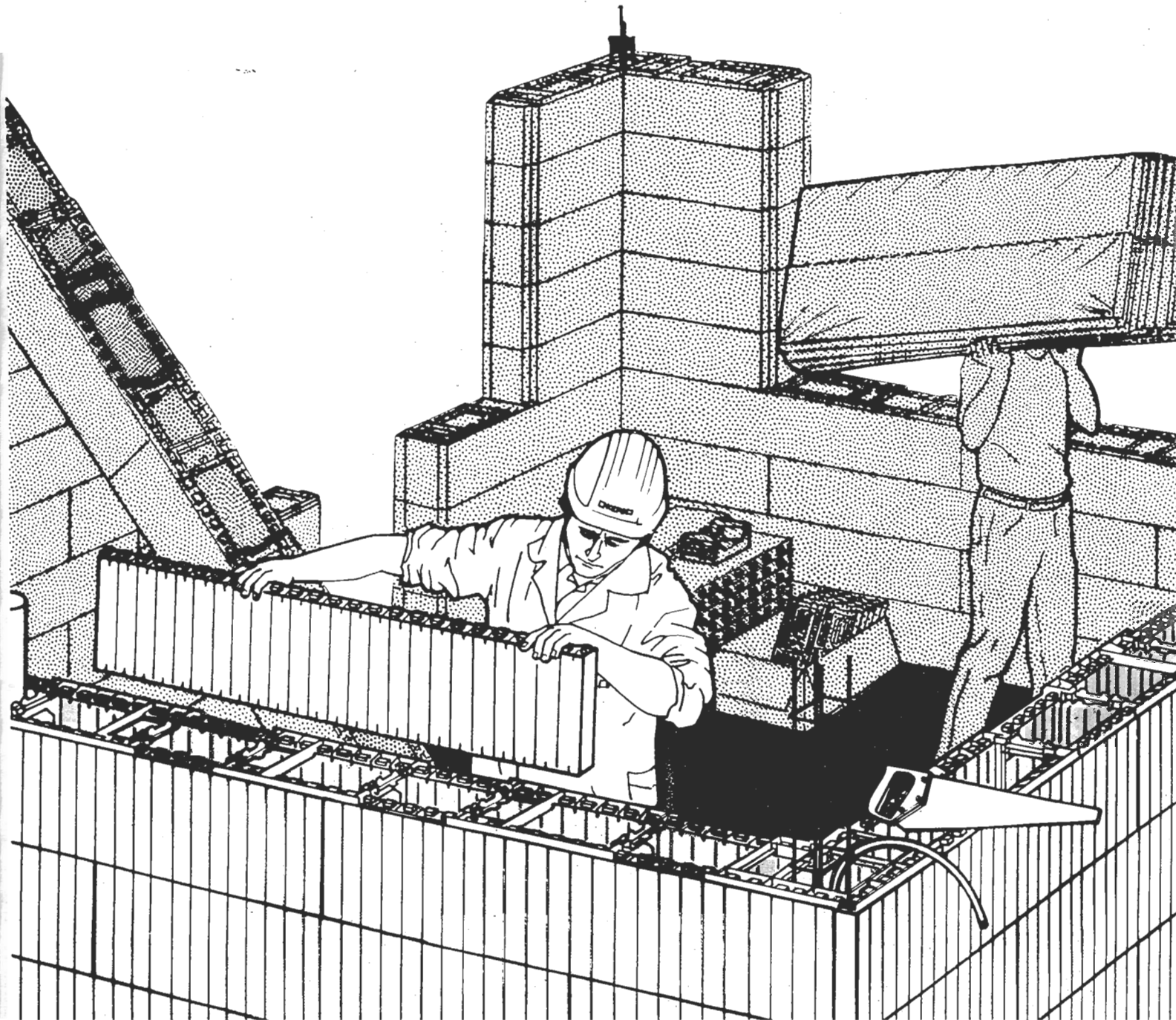
SPEED

PERFORMANCE

KEPS[®]

THE INTEGRATED INSULATED FORMWORK SYSTEM

CONSTRUCTION DETAILS

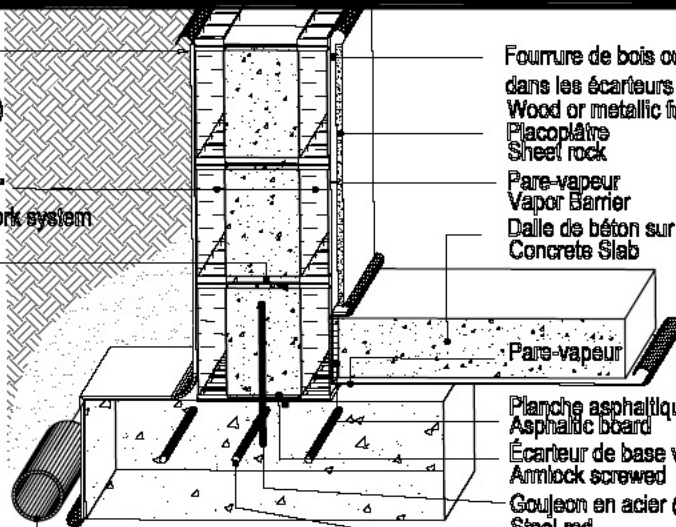


Membrane élastomère
autocollante collée sur le
mur de "KEPS" (fondation)
Water proof membrane

Panneaux isolants "KEPS"
"KEPS" Insulating form work system

Écarteur à volet
Amlock spacer

Drain français
Perimeter drain



Fournure de bois ou métallique, verticale vissée
dans les écarteurs horizontaux
Wood or metallic furring
Sheet rock
Pare-vapeur
Vapor Barrier
Dalle de béton sur sol
Concrete Slab

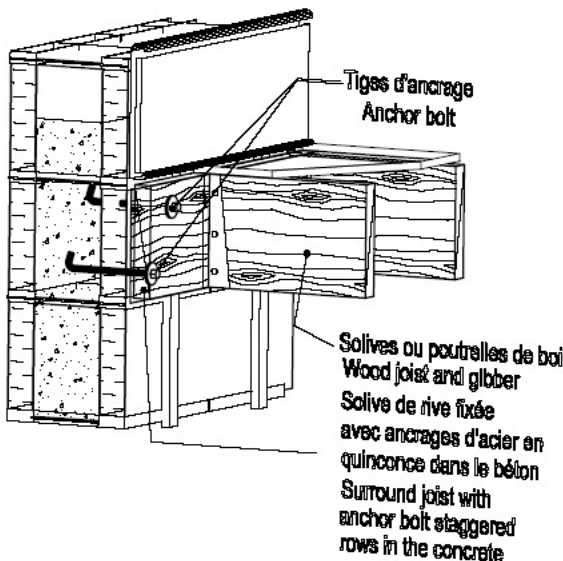
Pare-vapeur
Planche asphaltique
Asphaltic board
Écarteur de base vissé
Amlock screwed
Goujon en acier @ 24" c/c «Dowel»
Steel rod
Armature de périmètre
Perimeter rebar

"KEPS" SUR SEMELLE
"KEPS" ON FOOTING

01

NOTE 1 :
L'espacement et le
diamètre des barres
d'armature varient
selon les exigences
de l'ingénieur en
structure et selon la
capacité portante du
sol.

NOTE 1 : The
spacing & diameter
of the rebar must
respect the
recommendations
of the structural
engineer & depends
on the load bearing
capacity of the soil.

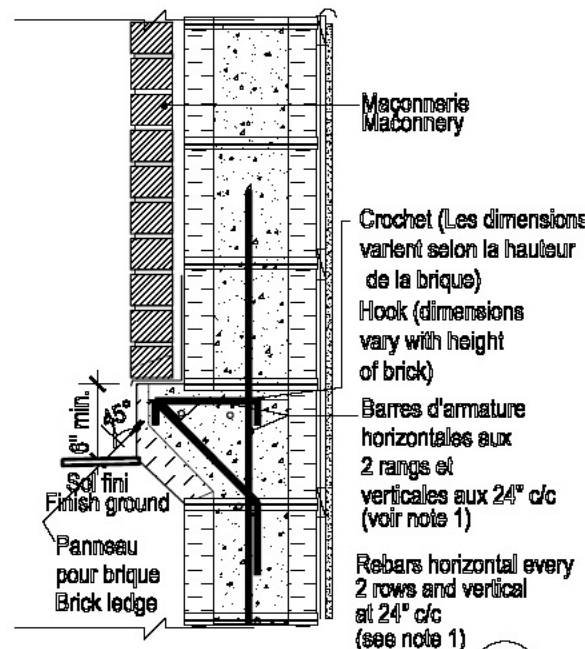


Tiges d'ancrage
Anchor bolt

Solives ou poutrelles de bois
Wood joist and girder
Solive de rive fixée
avec ancrages d'acier en
quinconce dans le béton
Surround joist with
anchor bolt staggered
rows in the concrete

FIXATION DE LA CEINTURE DU PLANCHER
SURROUND JOIST ATTACHMENT

02



Maçonnerie
Masonry

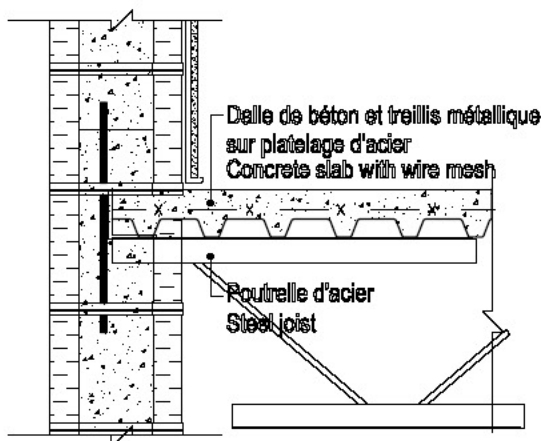
Crochet (Les dimensions
varient selon la hauteur
de la brique)
Hook (dimensions
vary with height
of brick)

Barres d'armature
horizontales aux
2 rangs et
verticales aux 24" c/c
(voir note 1)

Rebars horizontal every
2 rows and vertical
at 24" c/c
(see note 1)

ASSISE POUR MAÇONNERIE
BRICK LEDGE

03

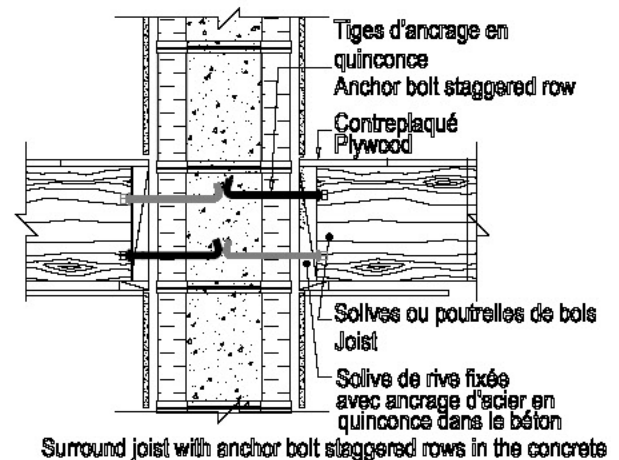


Dalle de béton et treillis métallique
sur platelage d'acier
Concrete slab with wire mesh

Poutrelle d'acier
Steel joist

APPUI DES PLANCHERS COMPOSITE
STEEL JOIST AND CONCRETE SLAB FLOORING

04



Tiges d'ancrage en
quinconce
Anchor bolt staggered row

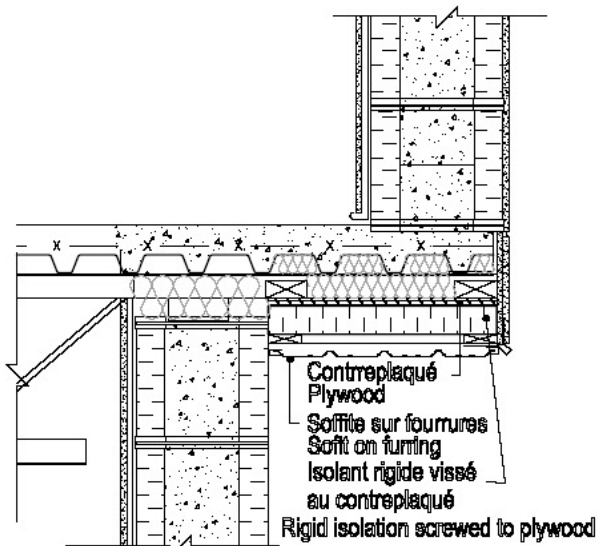
Contreplaqué
Plywood

Solives ou poutrelles de bois
Joist

Solive de rive fixée
avec ancrage d'acier en
quinconce dans le béton
Surround joist with anchor bolt staggered rows in the concrete

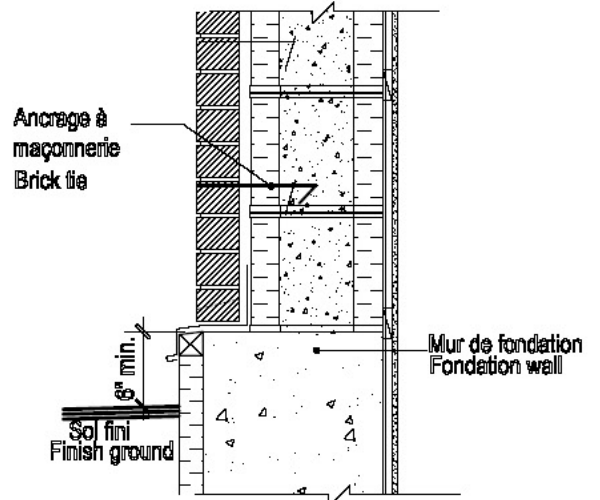
MUR MITOYEN ET FIXATION DES PLANCHERS
PARTIAL WALL AND FLOORS ATTACHMENT

05



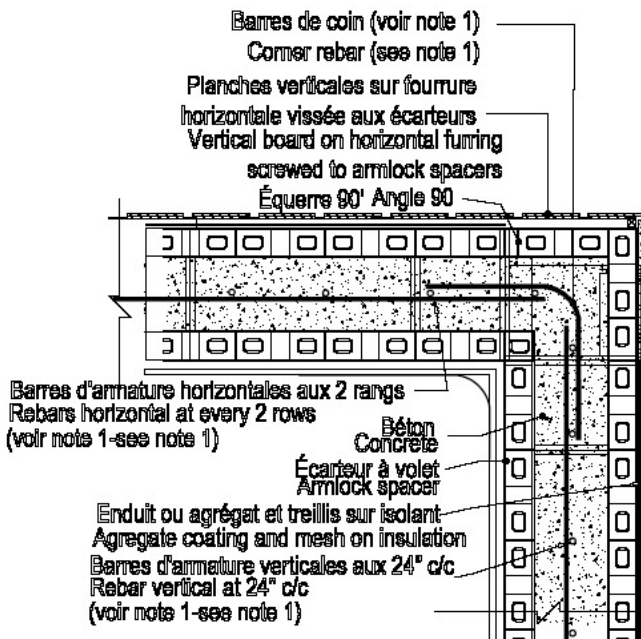
PORTE-À-FAUX
OVERHANG

06



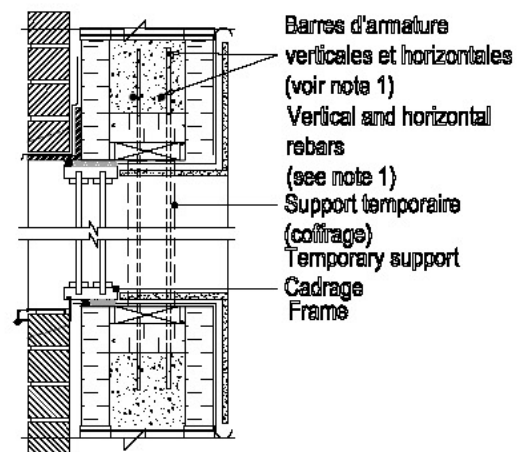
FINITION DE MAÇONNERIE
MASONRY FINISHING

07



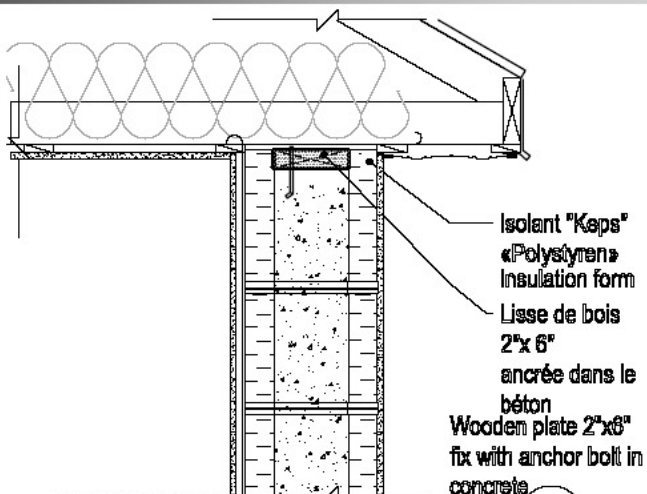
MUR "KEPS" ET FINITION (Détail en plan)
"KEPS" WALL AND FINISHING

08



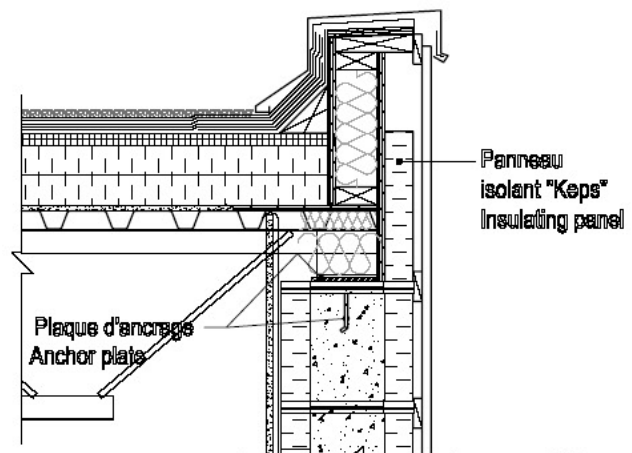
DÉTAIL D'OUVERTURE
OPENING DETAIL

09



FIXATION DES FERMES DE TOIT
ROOF TRUSS FIXING

10



FIXATION DES POUTRELLES D'ACIER
STEEL JOIST FIXING

11

KEPS TECHNICAL DATA

Canadian Patent #1234701

American Patent #460483

Canadian Construction Materials Center of National Research Council evaluation report #12256-R

Structural capacity: Conventional methods of calculation for concrete works in buildings as per National Building Code prescriptions and the norm CAN 3-A.23.3M "Calculation for concrete works in buildings"

Thickness of concrete wall: 4-1/8", 6-1/4" and 8-1/8" (110, 160 and 200 cm)

KEPS polystyren pannels contain no Chlorofluorocarbon (CFC) and are not toxic

Pannels density: 2 pounds/cubic feet. Pannels thickness 2", 2-3/8", 3-1/8" (5, 6 and 8 cm)

TYPICAL EXPANDED POLYSTYREN PHYSICAL PROPERTIES CAN / CGSB 51.20 M87

Physical properties	Imperial units	IS (metric)	ASTM test method	EPS 2 pnd / c.f.	Weight of components		Kilo. Pound	
					Volume of components	Cu.ft		
Thermal résistance	H. ft. 2 F	m. 2 CC	C 177-76	4.2 min.	Pannels 2,3/8 pack 16	11	10.5	23
R value at 75 (24 C)	Btu 1 inch	W 25 m ou	C 518-76	(0.73 min.)	Arm lock spacers pack 25	1.7	5.5	11
Thermal dilatation				3.5 x 10 (max)	Base spacers pack 25	1.8	4.75	9.5
Coefficient	inch / inch / F	m. / m. / C	D 696	(6 x 10 C-1)	Corners base pack 25	1.8	4.7	9.5
Continous temperature range F		C	-	up to 167 (75 F)	Standard corners pack 25	2	7	15
Intermitent temperature range F		C	-	up to 180 (82.2 C)	Container (4,500 Sq.ft.)			5,000
Compression resistance (minimum) to 10% deformation	Pound / inch. 2	(K. Pa.)	D 1621-73 1979	30 min. (206 min.)				
Deflexion resistance (minimum)	Pound / inch. 2	(K. Pa.)	C 203-82	60 min. (410 min.)				
Traction resistance (minimum)	Pound / inch. 2	(K. Pa.)	D 1623-78	51 min. (360 min.)				
Capilarity	-	-	-	none				
Water vapour permeability (maximum)	Perm. Inch	(ng/pa.s.m2)	C 355	1.2 max. (70 max.)				
Water absorption % per volume (maximum)	%	%	C 272	1.2% max.				
Dimensionnal stability linear variation in % (max.)			D 2126-75 (Art. 73.5)	0.2% max				

KEPS WALL PERFORMANCES

Refer to wall composition proposed at detail #9

	Concrete 6-1/4"			Concrete 8"	Concrete 4-1/4"	Notes
	KEPS 2"	KEPS 2-3/8"	KEPS 3-1/8"	KEPS All thickness	KEPS Idem	
Insulation factor. (R-value per inch = 4.3)	R-20	R-23	R-30	Idem	Idem	Total wall
Sound transmission coeficient (FSTC):	63	63	63	66	60	Total wall
Fire resistance (minimum):	3 hrs	3 hrs	3 hrs	4 hrs	2 hrs	Concrete only

Source: C.N.B. 1990 table A.9.10.3.A.
Plasti-Fab Ltd Laboratory

REMARKS ON CONSTRUCTION DETAILS

- 1- An inside vapour barrier is recommended. Outside air barrier is not necessary.
- 2- Wood joist or wood beams should be adequately protected when in contact with concrete.
- 3- Where KEPS foamwork is used as backfilled foundation wall, Eps compatible watertightness should be applied on joints, or a waterproof membrane installed to prevent water infiltrations.

Construction details and informations contained in the present document should be evaluated by the building designer considering the specific project to be realized. Kepsystem Inc. decline all responsibility regarding the misuse of the product.



Kepsystem Inc.
186 Boul. Industriel, #206
St-Eustache, QC J7R 5C2
duraforme@questzones.com

Tél. : 450-472-3560
Fax : 450-472-3561
www.keps.ca