Product Technical Statement



Company name	CONQRA
Company address	PO Box 24212 Royal Oak Auckland 1345
Contact person	Grant Brown
Contact details	0800 266 172
Email	accounts@congra.com
Product description	Apache



Product scope	The Apache is a free control vapour barrier slip joint for penetrations and capping. It is used to prepare sub-floor bases in tandem with the laying of DPM membranes to protect penetrations i.e., ducts and pipes.
	 Standard thickness is 250-micron plastic or can be custom-made to order. Available in 150mm, 250mm, 350mm and 450mm sizes or can be custom-made to order.
Product limitations	Do not leave exposed to UV
Design requirements	Apache is manufactured from InnoPlus LL7410D resin a linear low-density polyethylene with butene comonomers, with high content of slip and anti-block. Films extruded from InnoPlus LL7410D have high tensile strength, elongation, good toughness and outstanding puncture strength
Installation requirements	Estimate FFL and cut the top of the Apache off. Place Apache over pipe or service. Wrap DPM tape around the top of the Apache at FFL and to the base. Lay DPM over the service, splicing to accommodate the penetration and tape off (first vapour barrier stop joint). Cut small square of bubble wrap and place around the pipe sealing top, bottom and lap to form slip joint. Take second Apache out and place over the pipe, flattening sheet and taping to membrane. Fold the surplus Apache over the at the top and tape off to eliminate contamination of the pipe. Wrap further tape around the Apache. When concrete has been poured remove surplus wrap in readiness for the plumber. Pipe should move freely ensuring a vapour proof

barrier and seismic movement. For full instructions refer to video <u>Concrete</u> Foundations Made Easy | Video Instruction Tutorials (eziyaka.co.nz)

Maintenance requirements

Nil

Declaration I confirm that this product is not subject to a warning or ban

Sealing Multiple Penetrations using Congra Apaches



? The Problem

How to seal multiple pentrations.

7 The Solution

The Congra Apache



Cut two holes

Using the first Congra Apache, cut 2 holes in line with the outter two pentrations, allowing a gap of 50mm.



Cut the 2nd Apache

Trim the second Apache allowing a 25mm taping strip to allow for 50mm tape overlay seal.



3 Cut the 3rd Apache

Trim the third Apache allowing a 25mm taping strip to allow for 50mm tape overlay seal.



4 Place first Apache over the middle penetration



5 Place the second Apache over one of the outter penetration



6 Place the thrid Apache over the other penetration



7 Tape seal all leading edges

Seal achived! =





LL7410D

Linear Low Density Polyethylene Resin

Special Characteristics : InnoPlus LL7410D resin is a linear low density polyethylene with butene comonomers, with high content of slip and antiblock. This grade offers the excellent machinability on conversion lines. Films extruded from InnoPlus LL7410D have high tensile strength, elongation, good toughness and outstanding puncture strength. It is available for tubular blown film processing. Typical Applications: InnoPlus LL7410D is recommended for producing general purpose films, liners, food packaging, heavy duty and agricultural

Typical Applications: InnoPlus LL/410D is recommended for producing general purpose films, liners, food packaging, heavy duty and agricultural films.

Additives : Slip 800 ppm and antiblock 4000 ppm Typical Properties :

Properties	LL7410D	Unit	Test Method
Physical Properties (Based on pellets and pres	s-molded sheet)		
Melt Flow Rate (190 °C, 2.16 kg)	1.0	g/10 min	ASTM D1238
Density	0.921	g/cm ³	ASTM D792
Melting Temperature	121	°C	ASTM D3418
Vicat Softening Point	100	°C	ASTM D1525
Film Properties* (Based on blown film)			
	34/26	MPa	ASTM D882
Film Properties* (Based on blown film) Tensile Strength at Break (MD/TD) Elongation at Break (MD/TD)	34 / 26 600 / 800	MPa %	ASTM D882 ASTM D882
Tensile Strength at Break (MD/TD)			and a second
Tensile Strength at Break (MD/TD) Elongation at Break (MD/TD)	600 / 800	%	ASTM D882 ASTM D882
Tensile Strength at Break (MD/TD) Elongation at Break (MD/TD) Tensile Modulus, 1% Secant (MD/TD)	600 / 800 190 / 230	% MPa	ASTM D882 ASTM D882
Tensile Strength at Break (MD/TD) Elongation at Break (MD/TD) Tensile Modulus, 1% Secant (MD/TD) Dart Impact Strength	600 / 800 190 / 230 100	% MPa g	ASTM D882 ASTM D882 ASTM D1709

* Film made on blown film line at blow up ratio 2.5. Gloss (45°) obtained from 40 microns film while other film properties obtained from 25 microns film.

Recommendation :

The recommended temperature setting is in the range of 160 - 180 °C for extruder and 170 - 190 °C for die zone.

FDA Statement :

Food and Drug Administration US FDA 21 CFR 177.1520 and Commission Regulation (EU) 10/2011. More compliance regulations and standards that related to the product shall be exhibited in Product Regulatory Certificate (PRC) document.

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Note : Properties reported here are typical values of the product, not to be considered as specifications. GC makes no representations as to the accuracy or completeness of the information contained here

PTT Global Chemical Public Company Limited

555/1 Energy Complex, Building A, 14th - 18th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900

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Tel: +66(0) 2265-8400 Fax: +66(0) 2265-8500